



Images: Ilana Elbaze, Textures of C.A.S.T, 2017.

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ARCH FOLIO

This FOLIO represents a selection of design studio and graduate course work of the DEPARTMENT OF ARCHITECTURE in the Faculty of Architecture at the University of Manitoba in Winnipeg, Canada.

For more information about our school, please visit our website:

http://umanitoba.ca/faculties/architecture/programs/architecture/index.html











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INTRODUCTION

"...a space where making is entangled with thinking..." - John & Patricia Patkau, Material Operations (2017), p.14.

People, place and passion make our architectural program unique, imaginative and real. Our urbanprairie setting is Canada's central crucible of creativity and cultural complexity, offering fertile grounds for work that is as artistically ambitious as it is socially and environmentally responsible. Our faculty and students are dedicated to advancing the discipline, and everyone shares a passion for hands-on making and research.

We explore, discover and learn through making.

The core of our curriculum is the design studio. This is the place where thinking and doing converge in heuristic acts of making and worldmaking. In studio, students work through a variety of challenging questions, media and scales to explore vital tensions between technical and natural processes, cultural and artistic practices, experiential qualities and worldly phenomena. Design studio enables individuals to experiment widely, while ultimately making responsible design decisions for local situations in a dynamically interconnected world.

Studios are augmented by a growing array of making and thinking facilities: a FABLab, CADLab, Workshop, Architecture/Fine Arts Library. and Centre for Architectural Structures and Technology (C.A.S.T.). Architecture students benefit

from interactions with colleagues in our Faculty's kindred disciplines (Environmental Design, Interior Design, Landscape Architecture and City Planning) and across the University. Architecture students design everything from adaptable furniture to sustainable cities, from enduring buildings to transformative events. In the process we learn how the built environment not only supports and enhances lived experience, but is also meaningfully shaped by personal and collective imagination.

Students are fueled by their own expanding by professors engaged in diverse research, and invigorated by conversations and collaborations with professionals, industry partners, community members, and international leaders in architecture transpire during architecture school are the ones and design.

This was an especially stimulating year for architectural discourse, with manifold conversations and myriad guests. In 2016-17, over 100 individuals contributed to the curriculum To celebrate the stimulating variety of pedagogical as invited lecturers, critics and consultants. Speakers included prominent architects, authors and researchers, including Billie Tsien, John Patkau, Brigitte Shim, David Leatherbarrow, and John Ochsendorf; as well as distinguished alumni Dairmuid Nash (Moriyama & Teshima Architects),

Allan Bell (John Pawson Ltd., London), and Sasa Radulovic and Johanna Hurme (5468796 Architecture). Other guests included award-winning regional architects and advocates, such as David Penner, founder of StorefrontMB, and Susan Algie, director of the Winnipeg Architecture Foundation: as well as consulting engineers and industry experts, including John Wells of Crosier Kilgour & Partners, and Jeffrey Dolovich and Keith Gillis, of Gillis Quarries. Influential members of Winnipeg's arts, design and planning community also joined the conversation, including Brent Bellamy, creative director at NumberTEN Architectural Group; Alexander Mickelthwate, Music Director of the Winnipeg curiosities and convictions, guided and challenged Symphony Orchestra; and Angela Mathieson of Centre Venture

> Some of the most important conversations that students have with each other and themselves. Between events, after class, and late into the night, students dream and debate, doubt and defend, devise and discover the future of architecture.

approaches and student projects in the Department of Architecture, we have gathered this selection of work from the 2016-17 academic year.

Lisa Landrum, Associate Head & Associate Dean Research Carlos Rueda, Head, Department of Architecture



SURPASSING SURFACE

In response to notions of object as an endemic component and fascination of design, the studio intended to debate the roles of form and place in architectural process.

The studio was tasked with adopting an outward gaze in the architectural field. It sought to operate with a deep empathy for the world outside itself as well as an inward reflection on how our role as architects and designers sculpts the action of the built world.

To do this, a conscious departure was necessary from contemporary conceptions of the architectural object as an inscrutable and privileged entity. With the prevalence of instant gratification, the singular image handily gains currency beyond its merit. With such thin or surface thinking becoming dominant in both the architectural act and the wider western culture in which we live how do we now question "deep" problems of cultural or ecological issue? When all we digest on a daily basis is surface how might designers extend themselves to approach the considerable complexities of spatial and technological conditions unfamiliar to them? A refusal of this order requires that we engage in questions of deep contextual sensitivity, cooperative behaviors and

"The world is not an object such that I have in my possession the law of its making."

- Maurice Merleau-Ponty

systemic or ecological thinking. Without questioning our preconceptions of world around us, be it cultural, historical, sensual or spatial, how can we ethically claim that we have done our work? How do we resist the temptations of developing mere surface conditions?

Surpassing Surface has been a forum for debate on the role of objects in architectural making and leaves the door open for propositions of objects potency, effectiveness or perhaps its under considered potentials. To this end, we ask can object exist as a function of place? Where is the threshold of objectness? How may object participate in architectural action? Might objects possess intellect?

These provocations provided a framework for a series of exercises, each new work will build upon the last rather than existing as isolated ideas.

1. The studio developed a set of "operable objects" by deconstructing misunderstood found items and then reconstructing their form and purpose to the threshold of what could be considered object any longer. Here Questions were asked of objects agency in design, the value of the unexpected and basic questions of spatiality.

- 2. The studio will build a collective study of the city of Keewatin Ontario. Contextual studies ranging from speculative photography to deep archival research and resident interviews profited students with an array of information and opportunities beyond the surface readings of site.
- 3. The studio developed a set of speculative propositions for "rooms" that explored provocations uncovered by the physical, cultural, and economic conditions of selected Keewatin sites. The project encouraged the expression ideative content in physical interventions and reveled questions of the near ontological nature of "room."
- 4. Each site was developed by individual students as a schematic design proposal for an architecture that integrated some broader definition of mixed-use development. The post-industrial landscape of Keewatin and it's current escalating cottager economy was used as a springboard to speculate about how development of a community might make use of conditions previously discovered through earlier described studies.







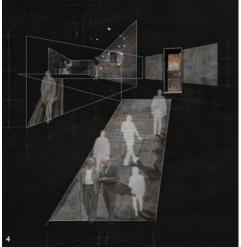




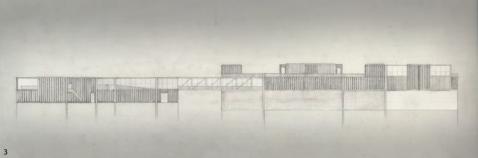


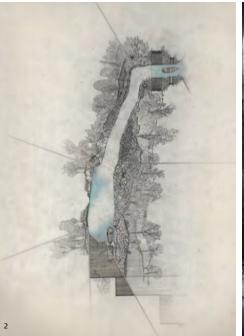






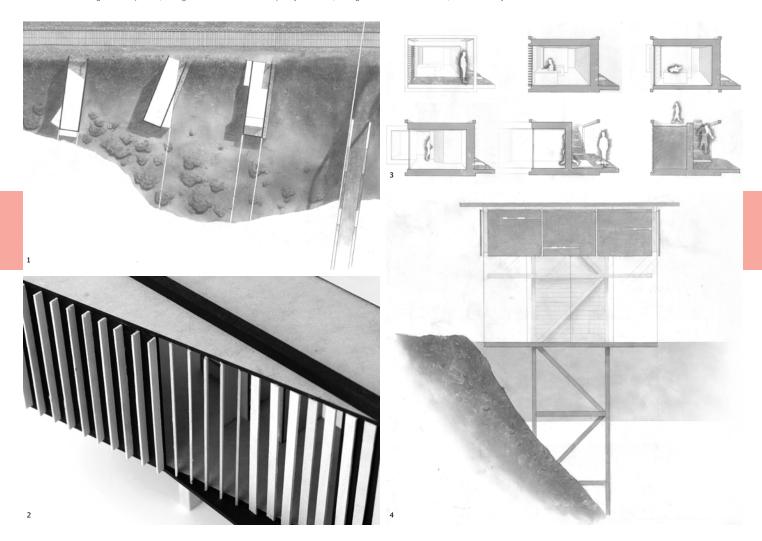


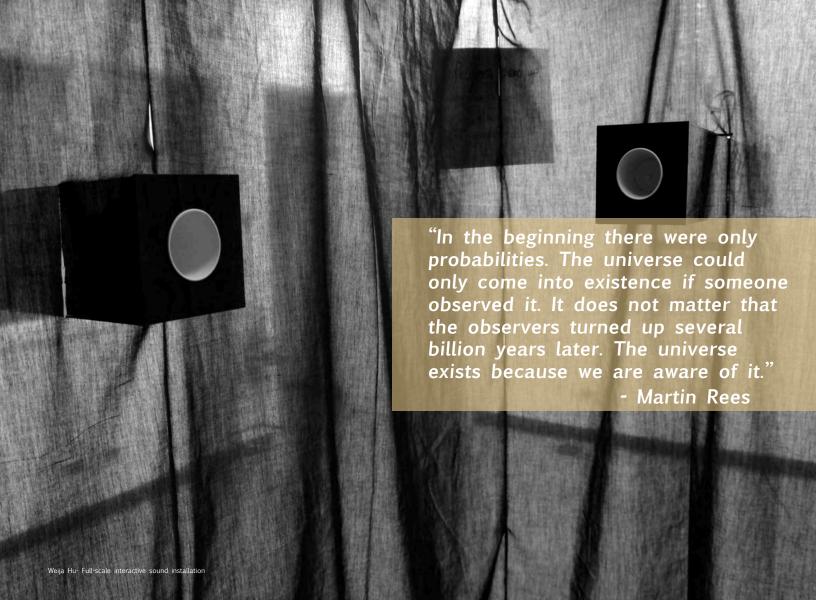






1-4: JP Austria - Writing Huts site plan (1); Writing hut model with modulated privacy screen (2); Writing hut transverse sections (3); Riverbank library elevation (4)





STUDIO: Jonathan Bailes, Tali Budman, Sarah Dankochik, Devin Dushanek, Connery Friesen, Britteny Hence Siwicki, Weija Hu, Manar, Khalil, Brendan Klassen, Mark Nowak, Sarabjeet Saka, Jianuo Zhou

- 1 Site
- 1. St Charles Hotel, Winnipeg, Manitoba
- 2 Projects
- 1. DEVIANT ANATOMY Dissecting + Exquisite Corpse
- 2. HAUNTING, SITE ANALYSIS- Locating and mapping
- 3. HAUNTING SPACE Constructing

HAUNTING SPACES

An exquisite look into the horrors of architecture

Students participating in this studio were invited into the uncomfortable world of incontinent acts and horrific architectural possibilities of the vacant historical St. behaviors. Understanding and valuing the deviant; to be Charles hotel. suspicious of appearances.

The studio encouraged a brevity to look beyond the normative and into the world of the exception. The Study of Architecture is ultimately the study of human behavior and social cognizance. To educate an Architect, one must acknowledge the space beyond the world of appearances and embolden a suspicion to look beyond the familiar and acknowledge the grotesque and the darker world of human character. We cannot study the "perfections" without bearing witness to the imperfections.

The First Project initiated students to the dark. Deviant this particular site. Anatomy looked at Dissection and Exquisite Corpse. Students selected objects of interest to section and examine. By dissecting, photographing and drawing and questioning a section, students explored the interiority of the world of their objects and their own. The following project looked directly at the architectural material brings with it an array of latent meaning and consequences of their study.

The goal of the Third Project, building upon the topological strategies of exploratory representations

"Certainly, horror prods the bounds of the thinkable. The horrible, like the mad, presents the world as it might be. It is utopianism without utopia, planning without plans. It speaks of the present in the future tense, and trough a kind of inversion - like the words of a fool, it is that which cannot be said under normal

from the last project, was to re-examine the

The guestion of inhabitation was at the forefront of developing the program for the vacant hotel St Charles hotel. The site visit and recordings supplied a significant base for developing unique and inventive programmatic sequences. Each of student was asked to concentrate on the way a specific mode of inhabitation can inform the physical body of architecture. Students were to focus on experience as the mediator of architectural experience, designing spaces that corresponded to specific modes of existence. The concept for the interventions also afforded an opportunity to further explore the conditions of what it means to "inhabit"

Material choices were directly informed by the conditions of the site and/or the student's "thesis statements". The materiality of the project supplied a range of tectonic possibilities, as one's choice of potential that cannot be ignored. In dialogue with one's strategy of making, the three-dimensionality of the architectural proposal resulted in an ongoing process of experimentation and invention.

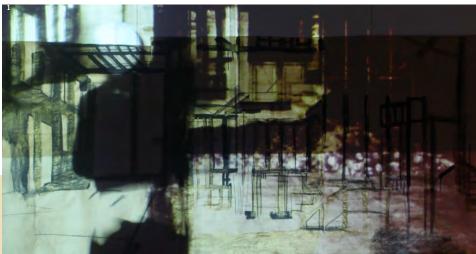
-Horrors in Architecture. pp. 8

Hotel have again focused on an iterative creative process as the generator of architectural invention. The final work was the culmination of a dialogue between distinct yet interrelated elements (site, verb, material and program), each of which added complexity, and supplies content to the project.

Students were to measure the site using their own bodies as a mediator and departure point. Students recorded the site through multiple mediums, such as photography, drawings, castings, or a combination of multiple tools etc. in attempt to measure the 'haunted' site, or the site 'unseen'. The development and deployment of their means of measure served to 're-figure', through inventive translation, the materials and relationships that defined the site. At all times, the site documentation and measurement attempted to represent how to find "habit in" or dwell in the site. Following the site recordings and measurements, students were asked to begin the schematic design proposal for the St. Charles Hotel. Pulling from their "haunted" site representations,

students are asked to begin the schematic design development of their proposition by naming their program.

1-3:1all Budman: Large-scale projection drawing mapping the "absent" spaces of the St. Charles Hotel, using the presence of her body as the mediator (1); Existing building section/collage exploring the absent traces of the site (2); Photograph of model (3);



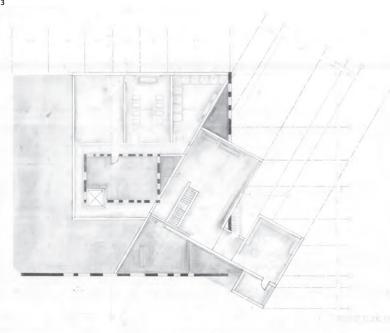


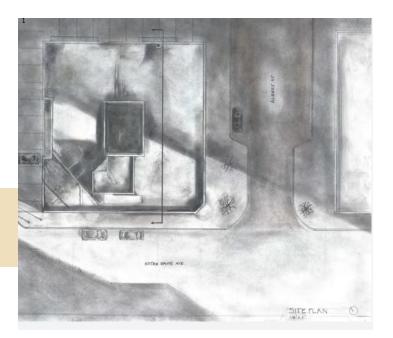


1-3:Tali Budman: Photograph of Final Model, looking towards the new proposed Intervention Immigrant Cetnre located on the first two floors of the St.Charles Hotel (1); Photograph of Final Model, looking towards the new proposed entry on Albert Street (2); Second floor plan drawing (3);

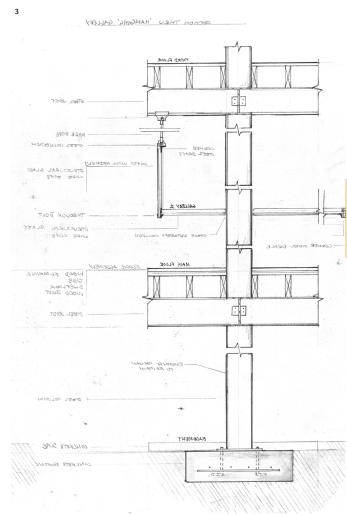


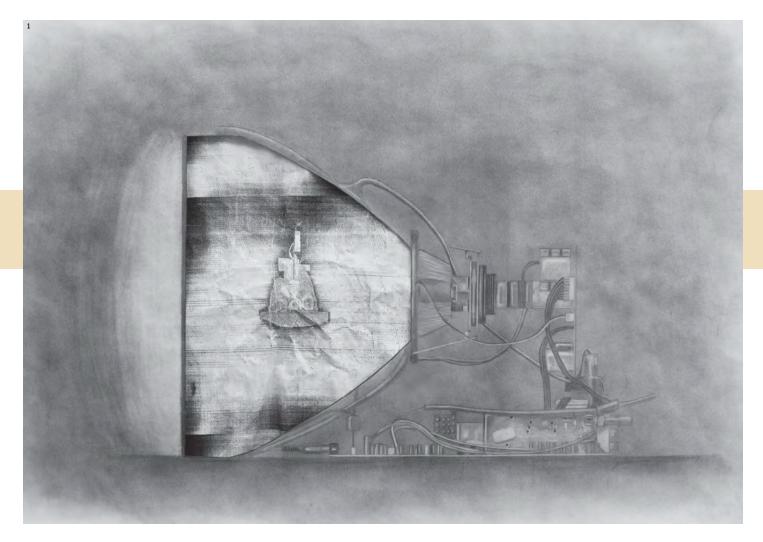




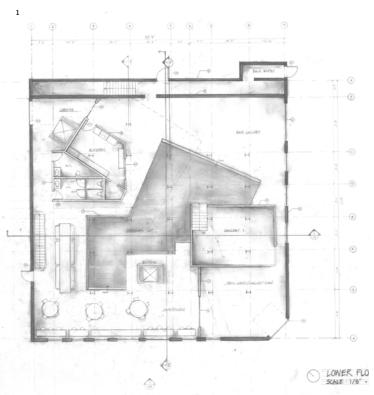


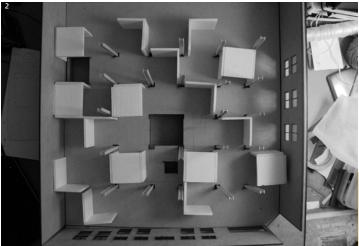






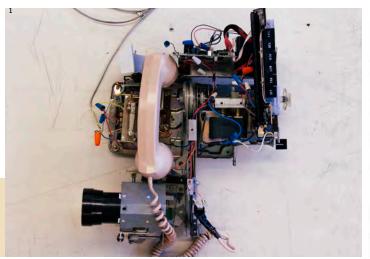
1-3: Jonathan Bailes - Rendered main floor plan of proposed gallery spaces inhabiting the basement/main floor of the St. Charles Hotel (1); Exploratory model of the interior gallery spaces (2); Photograph of final model - Interior space, looking down into the overlapping programmatic spaces (3);

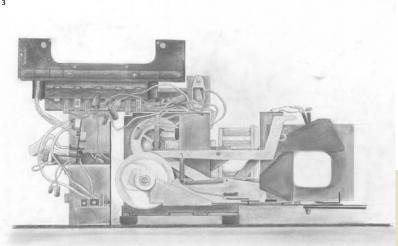


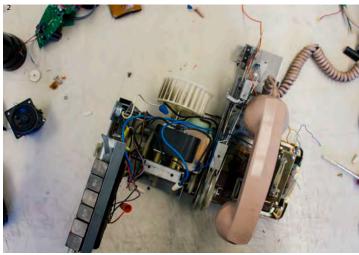


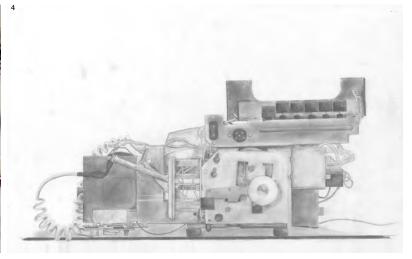




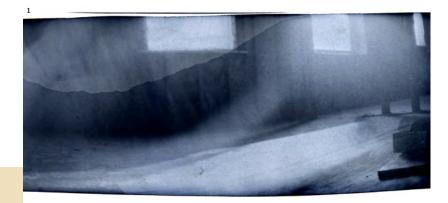




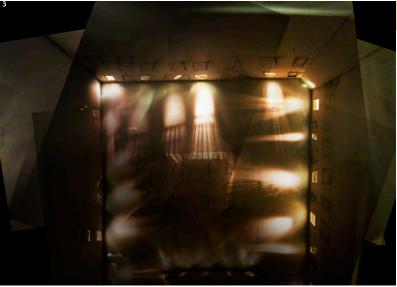




1-3: Connery Friesen - Pin-hole photograph of the St. Charles Hotel (third and fourth floors) (1); Study model exploring the existing "haunted" space from the "outside-in" (2); Photograph of the existing elevator in the St.Charles Hotel converted into a Camera Obscura (3);

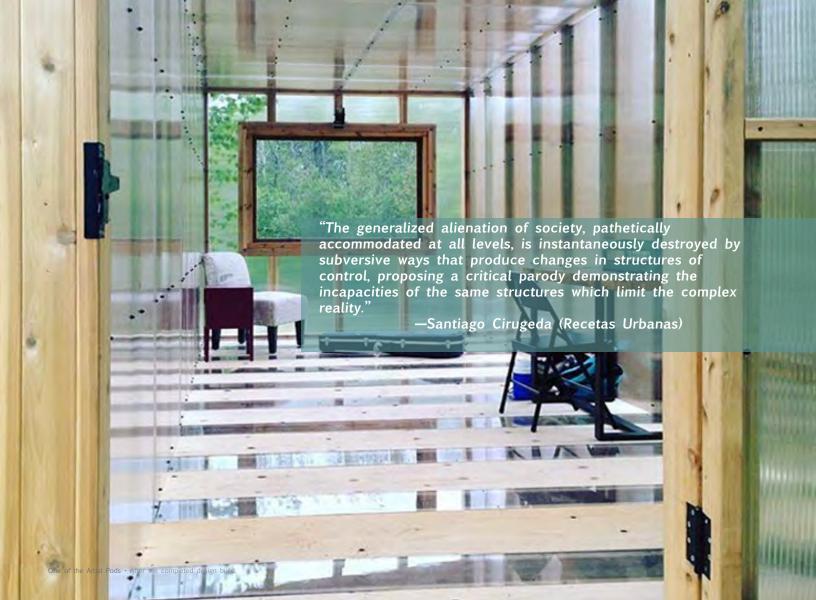












STUDIO: Bianca Dahlman, Meighan Giesbrecht, Dylan Hewlett, Ke Jiang, Violet Jiang, Kara Pankiw, Aeron Regalado, Kristia Villanueva THESIS STUDENTS: Erik Arnason, Emily Pawluk, Mackenzie Sinclair, Jonathan Granke Along with Shawn Bailey, Shawn Sinclair, Emily Bews, and Amanda Reis

SOCIAL TNFRASTRUCTURES

Social Infrastructures studio explored the connections between architecture and public space through the context of social urban relationships. How architecture can contribute to the advancement of the city through structures serving as agents for social change? The studio was organized through a series of projects, all operating within the analogy of practice, within existing sites and real clients. We collaborated with a community group in creating spaces for artists, we have proposed public washroom strategies for the homeless to the Winnipeg Regional Health Authority, and developed cultural facilities for underprivileged communities. All the projects addressed the urban nature of architecture, and the complexities of public space in all dimensions of interaction with this agent. One of the projects developed within the studio was the Tiny Studio project. This project was a collaboration with the community of Sioux Narrows-Nestor Falls's (Ontario) and its Bridge & Falls Studio and Residency Program. The objective was to build two artpods—park structures to serve as temporary studios for artists-to be designed and built by students in the context of design-build education. Design-build strategies advances considerably the students' understanding of architecture in a physical and social context, in full engagement with a community group. Innovative design-build teaching and learning methods were explored.

"There are things that they know much better than us, and if somebody knows how to make the most efficient use of scarce resources it's poor families, they are masters in establishing priorities, and we wanted to take that wisdom into the system.

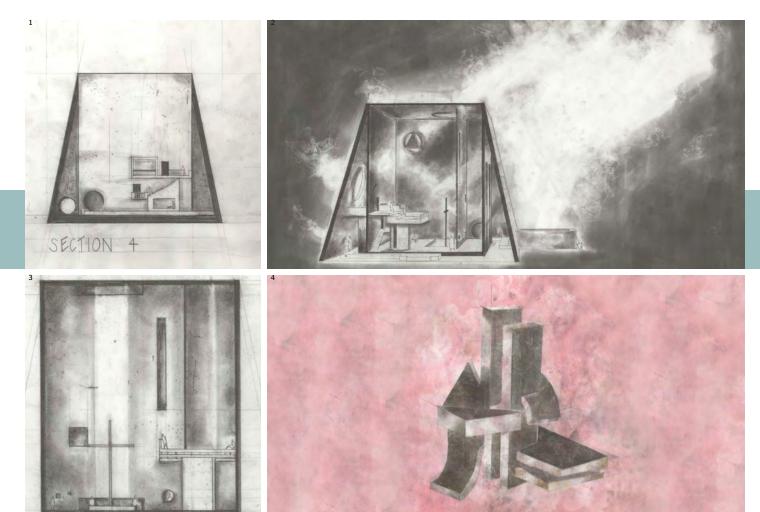
The methods to be used in this studio is a simile of the methods found in the professional architecture studio, with the addition of innovative and exploratory aspects related to technology, materials, construction, and pedagogy, including fabrication methods, building economics, ergonomics, responsive landscape, but principally, community engagement processes and the tackling of social issues. Design-build is the structure through which we worked. The Social Infrastructure studio created a place of reflection, work and real production, where the knowledge accrued in the project happened simultaneously within collaboration and making. Discussions, conversations, and critical exchanges are at the bottom of the design process. Unlike the conventional classroom where the instructor has the control through voice and focal presence, in the experimental studio the student is at the centre of the learning process, a leader of their own projects. Having a differentiated role in the learning process, the student now is at the centre, being more accountable for personal decisions. There are connections between the design-build projects and other learning experiences. Sometimes these relationships are quite evident, sometimes it is recommended that the students unveil these relationships as they are exposed to the design-build process. The potential outcome was an intensive learning experience for the students and the

-Alejandro Aravena

community, who received a response to their needs.

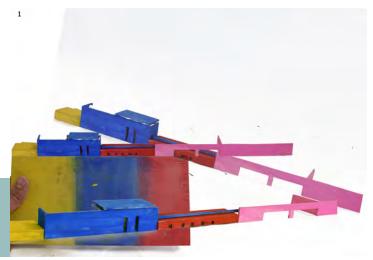
We have partnered with two local architects, Shawn Bailey and Shawn Sinclair from Boreal Architecture Studio Inc. (both graduates of our program), to develop the design, and to coordinate the local team and liaison between the community of Sioux Narrows-Nestor Falls and the University of Manitoba team. Boreal Architecture Studio Inc. is a collaborative architecture practice specializing in contemporary design. Boreal Studio along with the Social Infrastructure studio searched for the highest potential to deliver an artist studio and a mobile art gallery. To respond to the request from the clients we explored adaptable ways in which the community could engage with these spaces, delivering an architecture flexible to the particular needs of each occupying situation.

1-4: Aeron Regalado - Section drawings (1) (2) (3); Drawn collage of reassembled pieces of the sketch model (4);

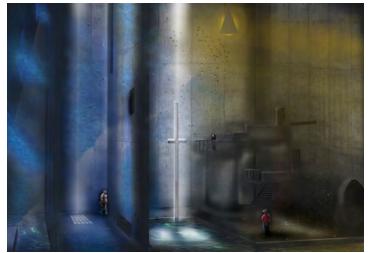


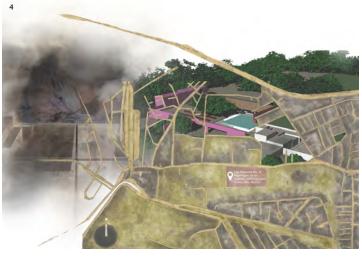
1-5: Aeron Regalado - Elevation of the final building (1); Site plan (2); Axonometric pull apart showing the components of the building(3); Final model (4); Concept model for light studies (5);







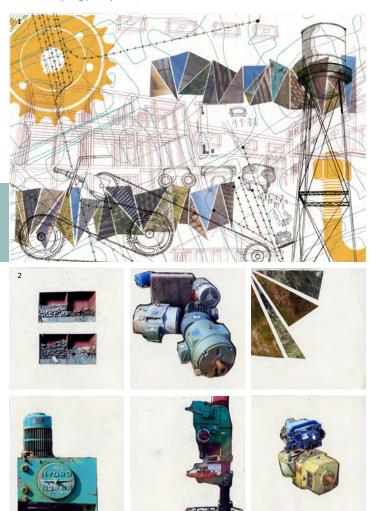








1-5: Meighan Giesbrecht - Drawing studying the magnet industries (1); Site collage series (2); Final model (3 & 4); Sketch model exploring public space (5);

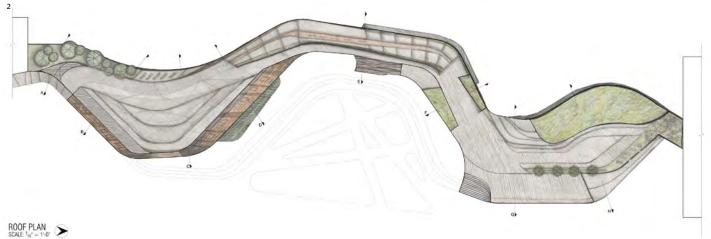








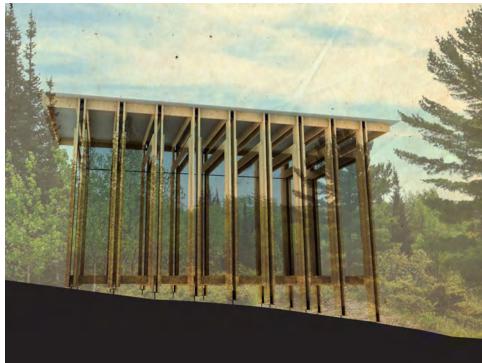






STUDIO ON THE ROCKS

WORKED ALONG WITH BOREAL ARCHITECTURE STUDIO INC.











1-8: Various Images - Process images during construction (various student photos) (1 & 2); Final images of the constructed studio (3-8);



















ARCHITECTURE OF EXCHANGE

This studio explores the idea of "exchange" in architecture: sensually, spatially, materially, economically, politically and socially. The underlying conviction of the studio is that "exchange" is the preferred relational mode between peoples, cultures, and socioeconomic groups, as well as material, biological or environmental processes. Critical to an ethical notion of exchange is the notion that all transactions are reciprocal and mutually beneficial.

TERM ONE began with a series of short exercises predicated on the notion of "decontainerization" as posited by Gordon Matta-Clark. Collage, photography and disassembly were used to explore images, spaces and items of clothing as an introduction to observational practices, representational modes and the ongoing themes of the studio.

The Second Skin project explored notions of the body, clothing and architecture as types of "vessels," and the potentials of shape-making, enclosure and exchange on an imaginary site and character.

The Vessel project entailed the design-build of a site-specific installation with the intention of catalyzing

"... the trickster is always there, at the gates of the city and the gates of life, making sure there is commerce. He also attends the inner boundaries by which groups articulate their social life ..."

- Lewis Hyde, The Gift

reciprocity or exchange in a liminal urban setting in Winnipeg. In modeling, drawing and constructing this project, students engaged with materiality and assembly intimately.

A field trip to Montreal required students to collectively gather "materials" and recipes for a meal project there. Students studied the history of Montreal and its regions, while focusing on the former site of Expo 67 for the commemoration of its 50th anniversary.

TERM TWO began with the WARMHUT Design-Build project – known as "The Carbuncle" –- completed by all four ED3 & AMP1 studios. This project entailed the design and construction of a WARM warming hut for the general public to be located by or on the Red & Assiniboine Rivers (and the Red River Mutual Trail) at the Forks in Winnipeg, as part of the International Warming Huts competition.

The main project of the second term was the Market Pavilion for Île Sainte-Hélène, the original site of Expo '67. This project coincided with several notable anniversaries: the 375th anniversary of the incorporation

of the City of Montreal, the 150th anniversary of Confederation; the 50th anniversary of the Montreal Metro, and the 50th anniversary of Expo '67.

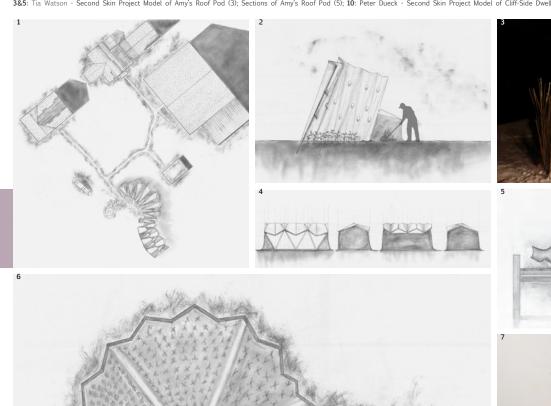
Located near the Jean-Drapeau Metro Station, the twostory Market Pavilion project drew its inspiration form the rich history of the island, current annual festivals and recreational activities, as well as the international world fair of 1967 which showcased architectural innovation and influenced a generation of Canadian artists and architects.

The Market Pavilion was to accommodate a market that offered products of agricultural activities grown on the island, among other "exchangeable items." It comprises a multi-season Market Hall, an experimental agricultural activity, a small café, bar or eatery, and a small cultural venue.

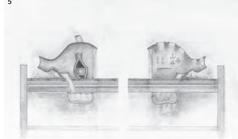
1-4: Alyssa Hornick - Photos of Disassembly of Garment (Shoe) (1); Second Skin Project Plan of Dwelling Pod (2); Section of Pod through Cliff (3) Model of Pod (4); 5-6: Andrew Simonson - Second Skin Project Section of Ice Shelter (5); Model of Ice Shelter (6);



1,2,4,6: Lexi Morse - Second Skin Project Site Plan (1);; Section of Graden & Dugout (2); Elevations of Shelter (4); Plan of Shelter (6);
3&5: Tia Watson - Second Skin Project Model of Amy's Roof Pod (3); Sections of Amy's Roof Pod (5); 10: Peter Dueck - Second Skin Project Model of Cliff-Side Dwelling-Nest (7);





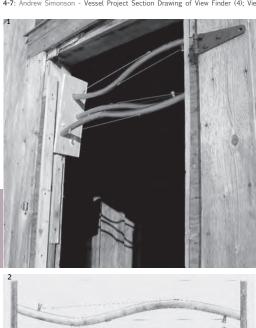


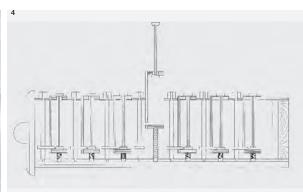


1-6: Lexi Morse - Vessel Project Whirly-gig before installation (1); Whirly-gig whirling (2); View of Installation from above (3); Plan of Weir with Installation (4); Section of Weir with Installation (5); Photo of Whirly-gig installed (6);



1-3: Tia Watson - Vessel Project Sound Organ Installed (1); Fabrication Drawing of Sound Ogran (2); Site Drawing (3);
4-7: Andrew Simonson - Vessel Project Section Drawing of View Finder (4); View Finder Installed & Revealed (5); View Finder Installed (6); Prototype of View-Finder (7);









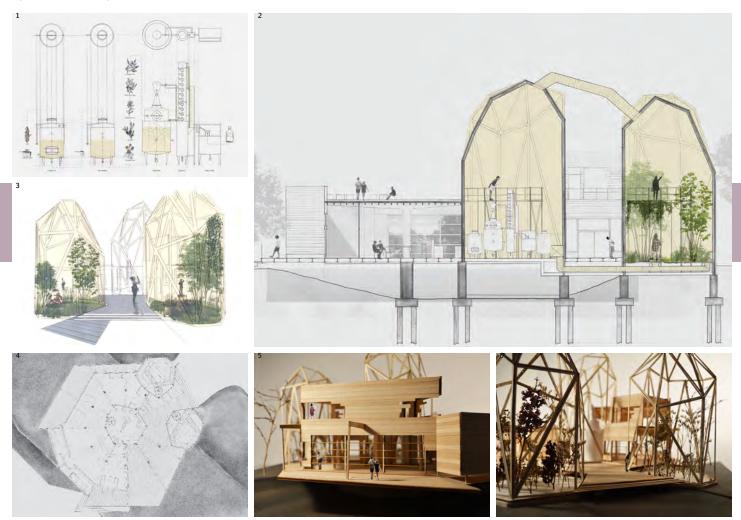




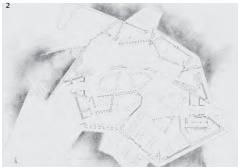




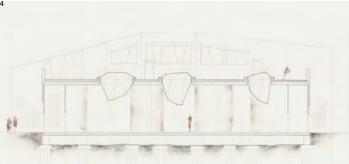
1-4: Lexi Morse - Market Pavilion Gin Distillery (1); Section Through Bar-Resto, Distillery & Botanical Greenhouses (2); Vignette showing Greenhouses & Terrace (3); Main Level Plan (4); Model Showing Bar-Resto & Terrace (5); Model of Greenhouses (6);

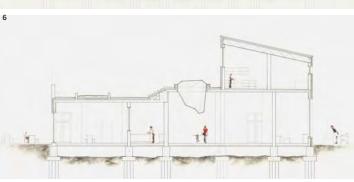


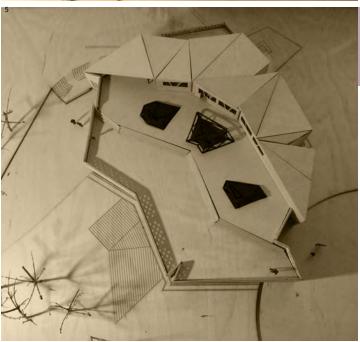




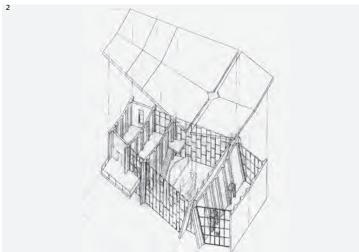


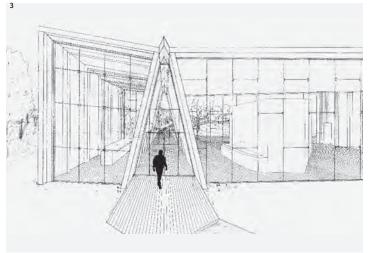


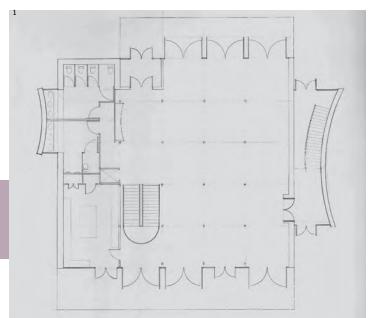


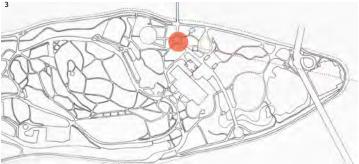










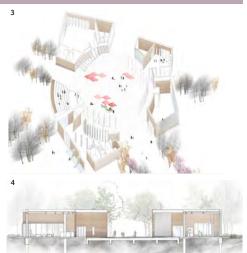








... the planted flowers & herbs attract bees, butterflies, and birds ...





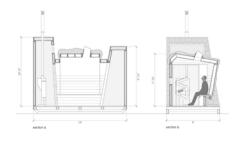
2017 WARMING HUTS

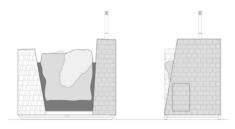
Professor Names: Eduardo Aqunio, Chad Connery, Terri Fuglem, and Liane Veness.

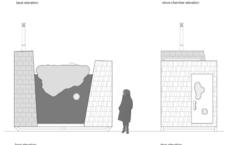
STUDENTS: Erik Arnason, J.P. Austria, Jonathan Bailes, Dennis Bergen, Tali Budman, Barah Dankochik, Jessica D'Toste, Peter Dueck, Devin Dushanek, Connery Friesen, Meighan Giesbrecht, Dylan Hewlett, Brittany Hince Swicki, Allyssa Hornick, Weijia Hu, Ke Jiang, Violet Zhiyu Jiang, Jihoon Jo, Manar Khalil, Brendan Klassen, Katie Lee, Lexi Morse, Mark Nowak, Kara Pankiw, Emily Pawluk, Jessica Piper, Stephanie Plouffe, Emily Raymond, Aeron Regalado, Sarabjeet Saka, Alexander Semegen, Andrew Simonson, Justin Squire, Mackenzie Swope, Krista Willianueva, Tia Watson, Ruviao Xue, Shu Yang, Aldrin Zapata, Jianuo Zhou.











CARBUNCLE

Carbuncle is the project submission from the University of Manitoba,

Faculty of Architecture for the 2017 Warming Huts Art & Architecture festival, at The Forks in Winnipeg, Manitoba. Four architecture studios, including 40 students from the Environmental Design and the Architecture Masters Preparation programs, formed a team with instructors.

The team began with a study of Northern saunas, a typology coherent with the Manitoba's Northern climate and culture. Our inquiry engaged the field of technology, as the intention was to explore innovative, feasible, and sustainable technologies in order to advance an effective inhabitation system fitting Winnipeg's cold temperatures and frozen river surface. The International Institute of Sustainable Development (IISD) played a key collaborative role in this process. IISD has developed technologies to transform the locally harvested biofuels, such as cattail (Typha) and native prairie grasses, into pellets to burn in a pellet stove. Harvesting cattail and prairie grasses captures this phosphorus before it can enter urban waterways and Lake Winnipeg.

Carbuncle works like a sauna, serving as a warming chamber for walkers, skiers and skaters promenading along the Red River/Assiniboine ice trails. The project considers architecture as a social condenser within urban culture, inviting the public to relax within the hotspot of a sauna. The criteria for the process included an aesthetic referencing Winnipeg's dirty realism and the collision of different vernacular personalities to signify a wide range of positions within the group's diversity. In the end, carbuncle's triad of asphalt shingles / insulation foam / cedar shingles compressed into a single building, synthesizes the Midwest culture of hybridized domestic architecture.













Prof. Eduard Epp

STUDIO: Alex Ross-Gautron, Brendan Dyck, Dana Veisman, Hugh Taylor, Jason Wall, Jeffrey Davis, Joseph Palmarin, Junnelfa Cadiz, Laurie Aftanas, Melissa Folk, Victoria Lovell, Zachary

THESIS STUDENTS: Julia DeFelice, Stefan Klassen, Mingpeng Liu

SPATIAL RECALL:

PROPOSALS FOR THE NATIONAL CENTRE FOR TRUTH AND RECONCILIATION

Spatial Recall is directed to understanding Indigenous architecture or more correctly, 'Indigenous space'. It is about memory, about place and about inhabitation of Indigenous peoples from pre-contact to today: with reference to the legacy of Canada's Residential School system: the work of the Truth and Reconciliation Commission and; the prospects of designing a national institution / gathering place to commemorate, to educate and to heal. A 'wish list' building program and a site on the University of Manitoba grounds have been proposed for this project. Our studio embraced this program and site as a means to begin a conversation about the future of the National Centre for Truth and Reconciliation and the recovery of Indigenous space.

We will engage regional and national conversations of reconciliation. We will examine what reconciliation means regionally and nationally in relation to the Residential School System. We will have the opportunity to engage with Indigenous community and spiritual elders and leaders, architects, students, and others who are advancing Indigenous futures - and with reference to the architectural project. We will have to be prepared to listen, to challenge our own preconceptions and misconceptions. We will have to be open to question our own ontologies - our theories of

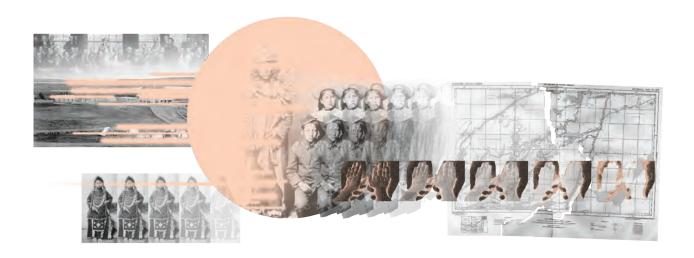
being in this world - and be open to others. We will have to question our identity, the historical trajectory of colonization in Canada, and our role in it.

Our studio will require a fresh approach that is supported by a heightened sense of social and ecological awareness - of Indigenous peoples. We will advance social and cultural notions of memory, truth and re/conciliation as well as notions of environmental accounting, resilience in natural and human systems, and of material fitness. We will posit new forms of settlement and occupation predicated on a deeper understanding of our cultural notions of in/habitation as these have been understood historically and today. We will develop hybrid architectures / building types that intersect between human needs and desires expressed in the rhythms of daily life with the natural processes and rhythms of the earth - between Indigenous peoples, the Colonizer and Others, and with a profound sense of accountability to the legacy of the Residential Schools, and for those that follow. We are proposing to engage this studio through acts of 're / conciliation' - and in relation to designing the National Centre for Truth and Reconciliation.

And so, we may ask:

- · What are the 'discourses' associated with re/conciling by Indigenous peoples, by 'colonizers', and by 'others' and how can these be accounted?
- · What are the poetic possibilities associated with re/ conciling ourselves expressed through words, images, art, and dance?
- · What are the architectural possibilities associated with re/conciliation expressed through form, space, light, and materiality?
- · What new forms of work and representation are made possible through this effort of re/conciliation?

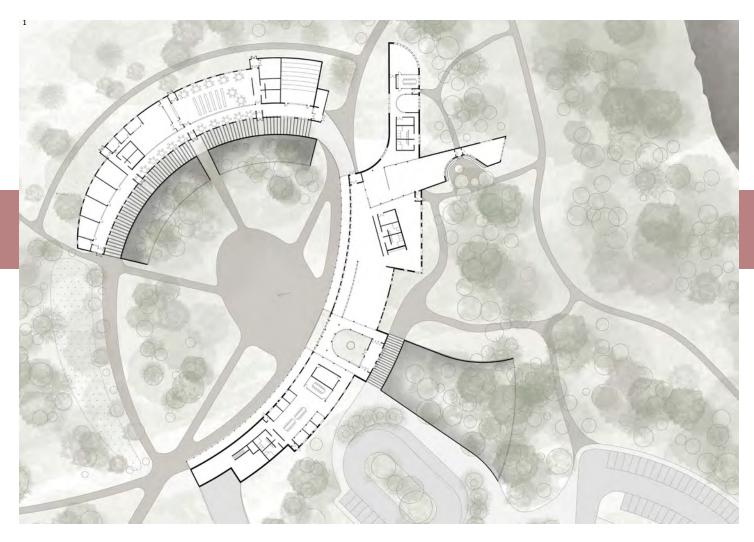
The University of Manitoba is located on Treaty 1 territory, on the traditional lands of the Anishinaabe peoples and homeland of the Metis Nation. The City of Winnipeg (1873) and the UM (1877) were founded at the junction of the Assiniboine and Red Rivers and at the crossroads of the Anishinaabe, Metis, Cree, Dakota, and Oii-Cree Nations. These traditional lands are located in the Great Plains region of North America at the intersection of five major river basins.













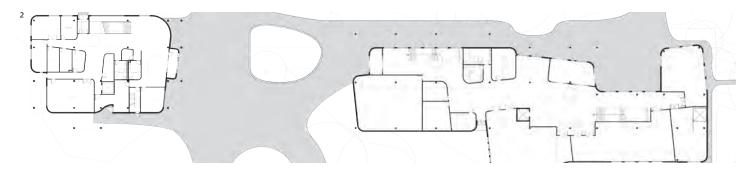


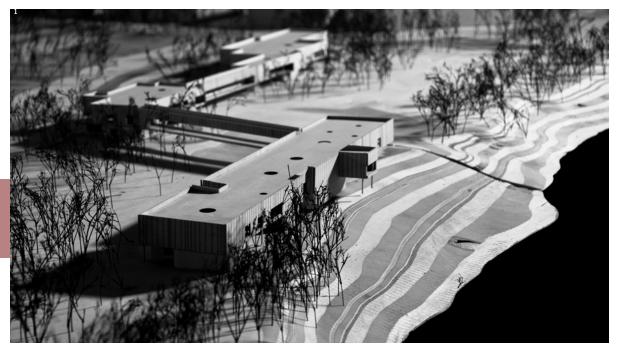




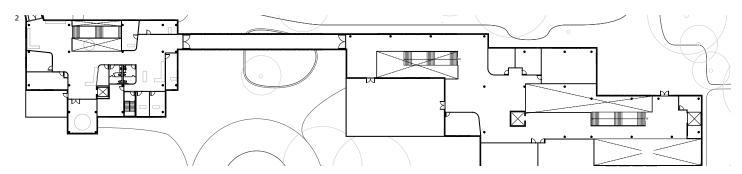










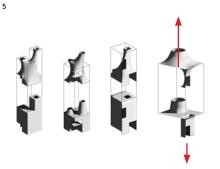


















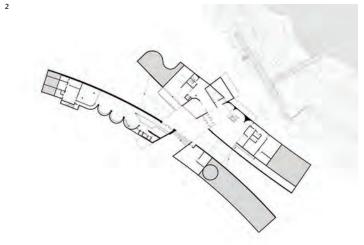


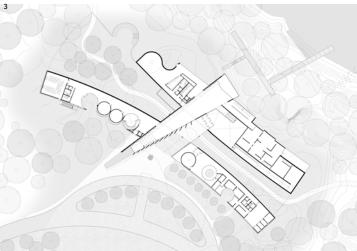


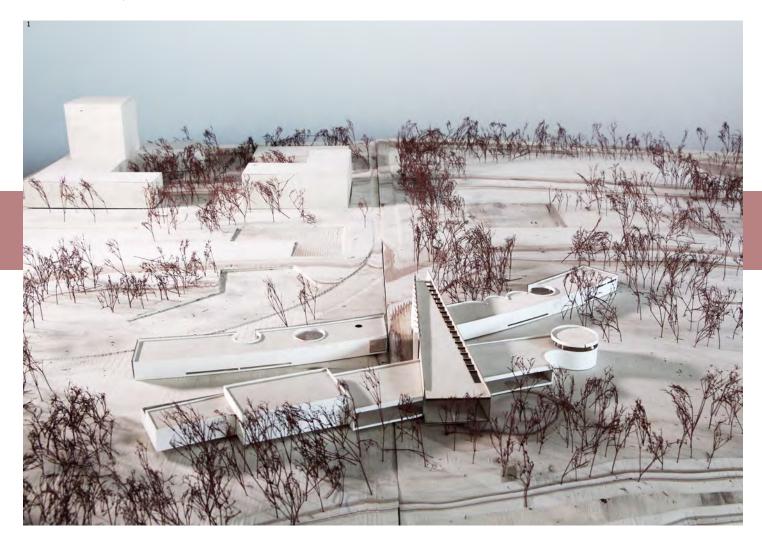








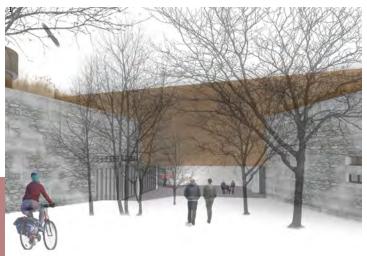








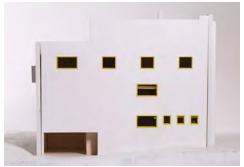






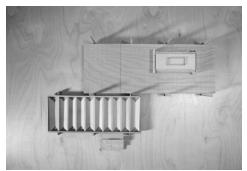






















ANALYSIS AS DESIGN

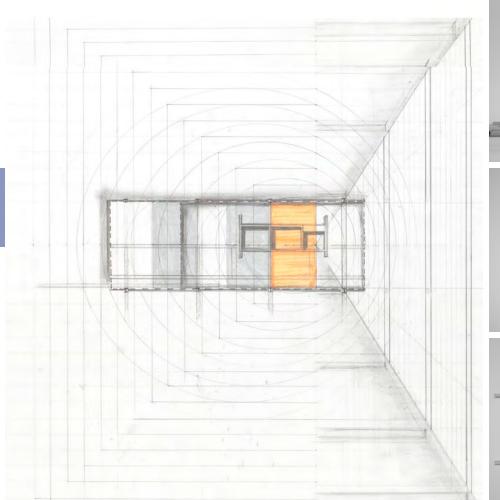
Analysis is a poetic and intellectual form of design. In this studio we will carefully study the Modern masters to gain a deeper understanding of their work and our historical positions. The etymological root of analysis reveals an articulation of the parts to the whole, where extracted elements communicate an explicit idea in context. Analysis also reveals what cannot be seen and perhaps sensed when one experiences architecture. Students will act as detectives, carefully reading original writings from the architects we will study, to discover the ideas and concepts that drive their architecture. Students will design, draw, and build extractions to communicate core concepts. Context and siting, structural systems, programmatic invention, and materials will be interpreted for clues. Anticipating synaesthetic experience through the reading and interpretation of architectural language in drawing will invest notational marks and syntax with

The etymological root of analysis reveals an articulation of the parts to the whole...

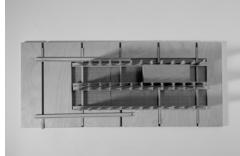
corporeal meaning. Students will use analytic models and drawings to author and breed a new authentic architecture. Proficiency in Modern architectural language and concepts will debunk the simplistic formal exercises so popular in post-modern and contemporary architecture. Fragments will be measured with respect to the whole.

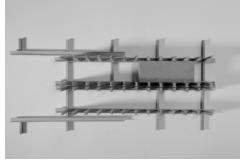
The analytic extractions in drawing and model will serve as a series of genetic codes for the design of a new house with an authored program. The house will be scaled to the city with a public civic program and a private domestic program. The students will select the appropriate urban site in downtown Winnipeg to embed their genetic analytic fragments. The students are encouraged to limit the use of space for their programs in an effort to advance sustainable interventions in

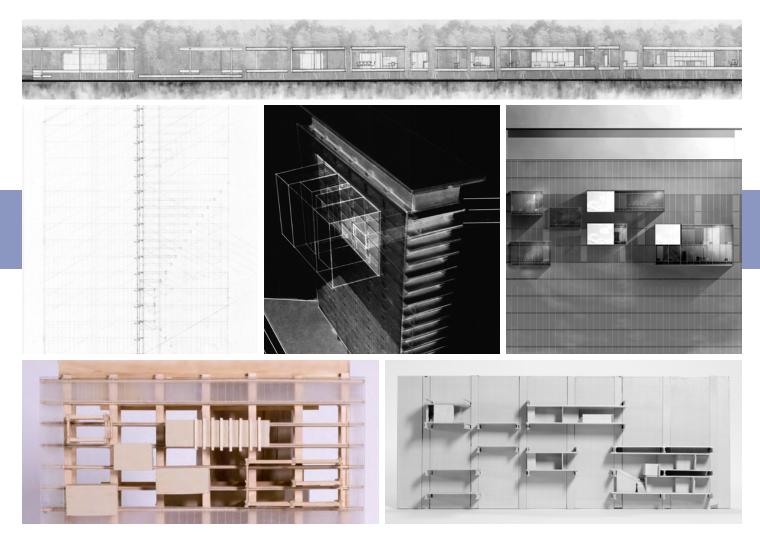
dense urban fabric. Addressing the scale of the city while maintaining the intimacy of a house is key to this studio. Students are challenged to make more with less; an urban scaled intervention with limited and efficient space use. The final project is a complex intertwining of private and public programs in a house scaled to the city and the city scaled to the house. Students will be encouraged to experiment with forms of presentation and representation in drawing, models, and other mediums. A careful reading of Nietzsche's On the Uses and Disadvantages of History for Life will thrust the studio into a critical dialogue of our treatment of history and precedents.

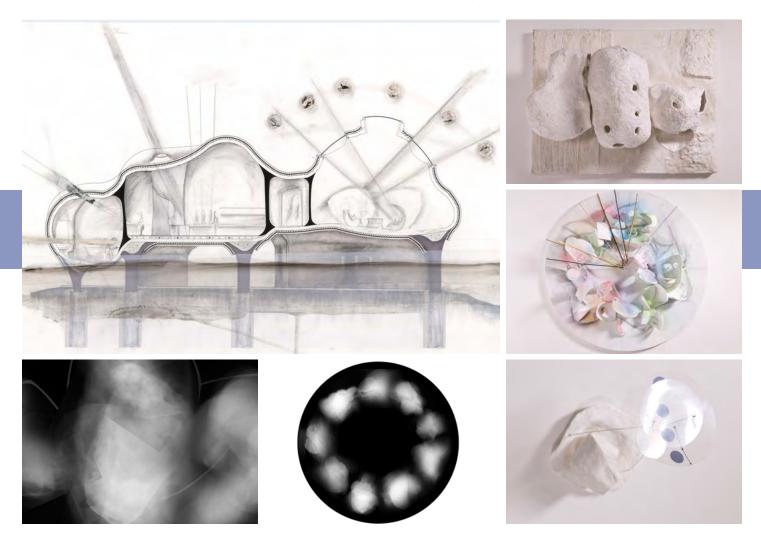




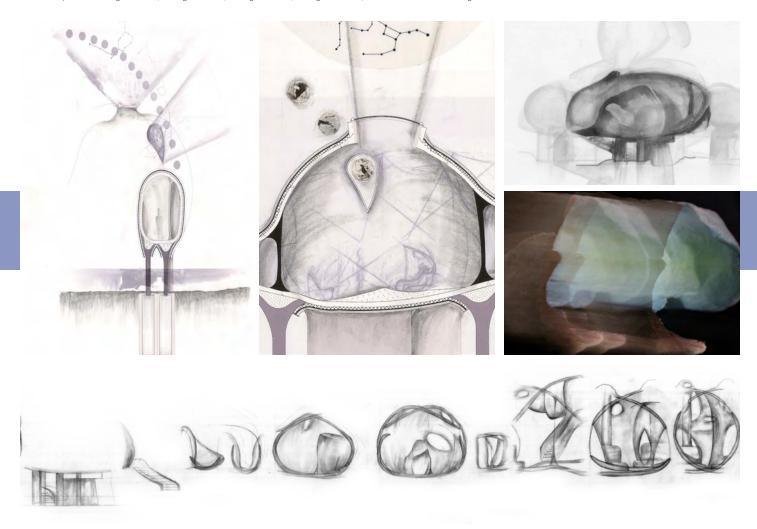






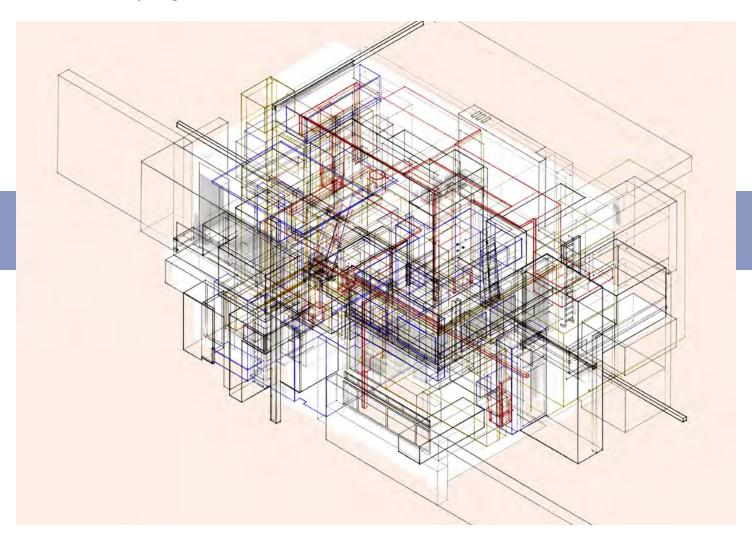


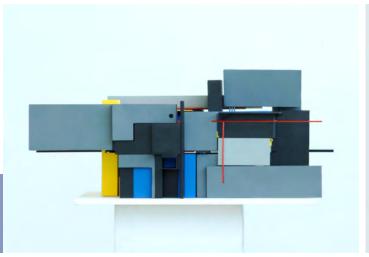
7-11: Claire Spearman- Building Section (7); Building Section (8); Building Section (9); Building Section (10); Endless House Unfolded Building Section (11)



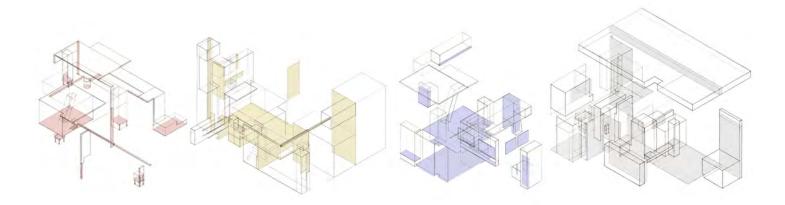


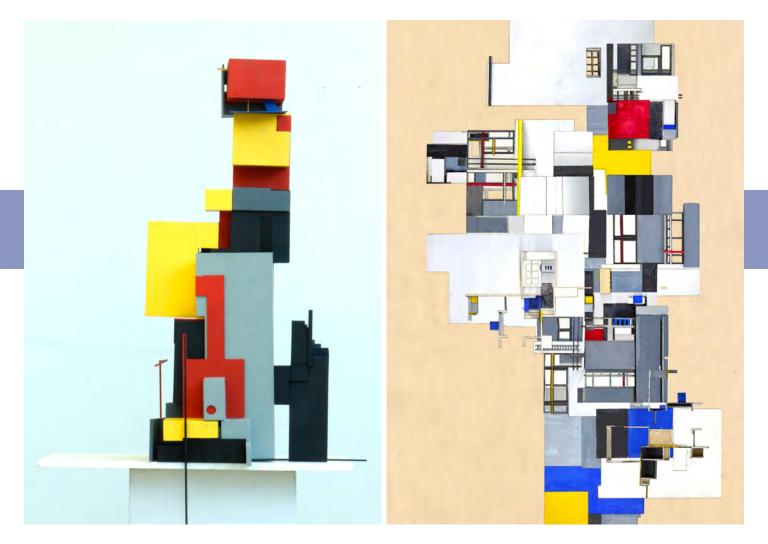


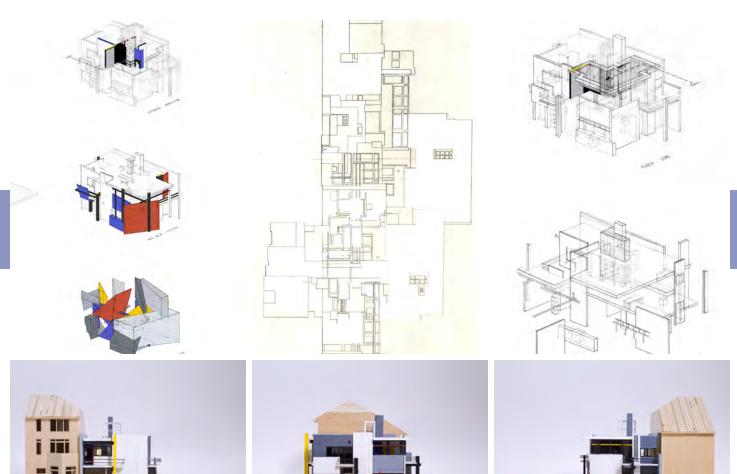


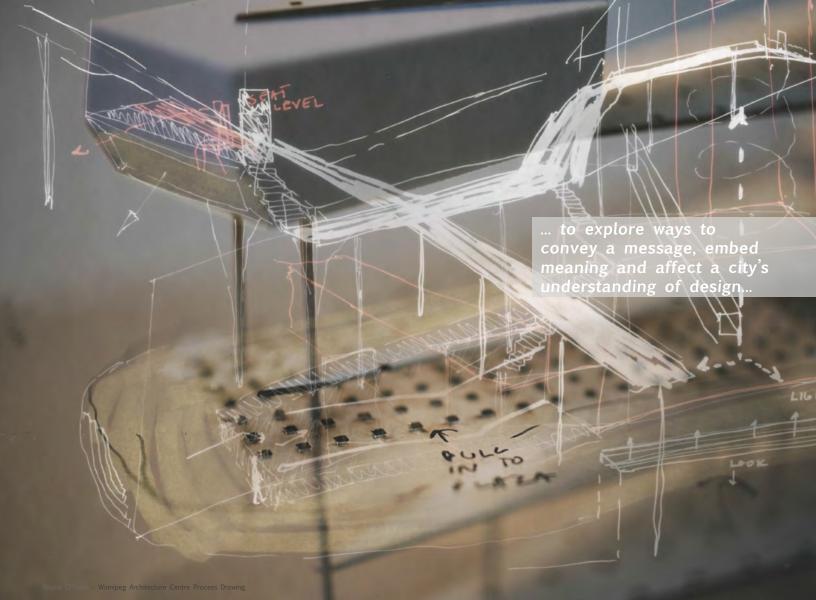












CRITICAL PATH:

FROM A THEORETICAL POSITION TO BUILT WORK

Winnipeg Architecture Centre

"The mission of Winnipeg Architecture Centre is based on the fundamental premise that architecture is a public concern. The Centre will aim to increase public awareness of the role of architecture in contemporary society and to provide a public interface to architecture by promoting education, scholarly research, architecture/design related activities, events, talks and exhibitions, '

- anonymous, 2016.

Being many years removed from the time when architectural practice, teaching and discourse was dominated by a singular movement or theory, and even further removed from historical practices and their embedded knowledge, we will explore the role of theoretical position to today's architectural practice. Believing that architectural theory should be primarily expressed in architectural terms we will look first at various practices. The firms to be researched have all contributed to architectural discipline and their local cultures through their work and are in different stages of their careers. We will examine what their

theoretical position is, how it was formed, if its changed over the years and how it has informed their design output. We will try to establish broader trends or themes that become evident perhaps within a locale, age of firm, economic condition, size of firm, predominant project typology, approach to materials etc.

In addition to this a series of texts will be studied to better position the specific firm research within current architectural discourse, and ensure that the forthcoming personal position statement is not simply self defined and of little use.

At the end of this research and positioning phase we will visit leading Canadian firms in Toronto and Montreal to hear their approach to this topic and how it informs their practice, and participate in "POP CAN CRIT", a one day seminar in Ottawa hearing from the prominent voices of Canadian Architectural Criticism.

The established individual position will serve as the driver of the design for the remainder of the term and into the winter term of the studio. Students will use their "manifesto" as an instigator to establish the direction of their project and determine its goals and objectives. As the design progresses from conceptual design through schematic and design development, the position statement will serve as a lens to critique their own work, a filter to help make critical decisions, and a marker that positions the project within current architectural thinking.

The design project will be for a NEW ARCHITECTURE CENTRE in Winnipeg's urban core that will house local design and architecture advocacy groups. These groups include StorefrontMB, FAUM, MAA, WAF, Design District Winnipeg etc. This building program offers a unique opportunity to explore ways to convey a message, embed meaning and affect a city's understanding of design through its physical manifestation. You will be asked to balance a variety of programmatic needs, varying or differing mandates from each institution, urban conditions, site restraints, budget considerations and other factors part of a comprehensive design project.

This term will conclude with a schematic design for the Centre presented at the final presentation driven by a clearly articulated, and substantiated architectural position.

OB. JECTIVE:

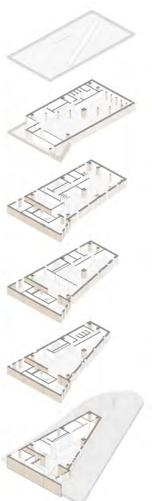
building on your manifesto, develop a strong theoretical departure point for your building project position/frame your work in the broader context of contemporary practice investigate the embedded meaning + message of

architecture, its approach to built form, architecture's relevance, role and relationship to the public and context in the contemporary world establish a strong and meaningful presence for

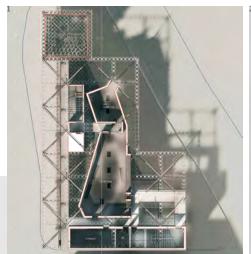
architecture in the local/global context through built work

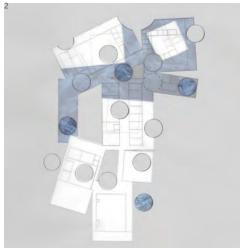






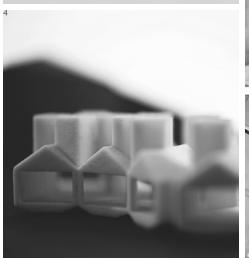
1-7: Royce O'Toole - Building Plan (1); Drawing studying MOS Puppet Theatre Ceiling (2); Site Analysis (3); Study of MOS Building (4) A built 1:1 detail of a unit of the facade (5-7);





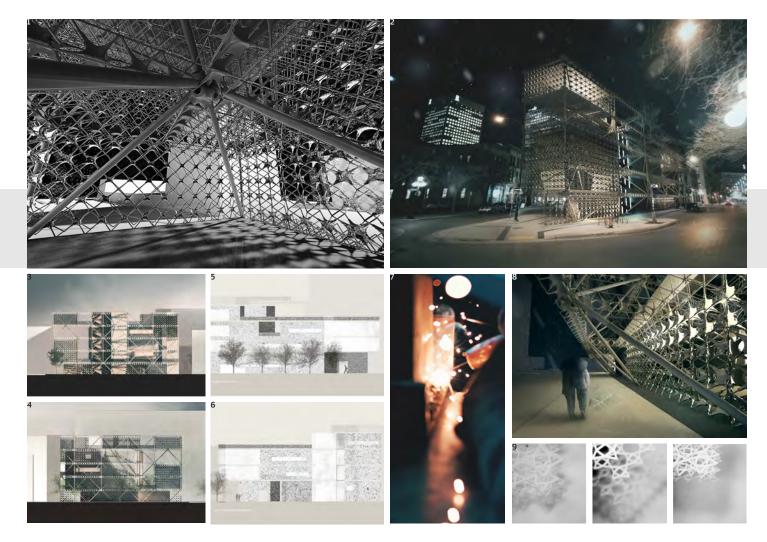














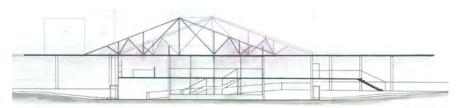
Carlos Rueda Ted Landrum

STUDIO: ED4 Meiyi Yang, Alena Rieger, Teigan Harrison, Mateo Linares, Nicholas Bava, Nathan Keebler, Halley Sveinson, Kelli Wiklund, Andrew Fritschii, Robyn Fossay, Kevin Partyka; AMP2 Luxia Meng Yang;

THESIS: Emeil Alvarez, Zaid Bin Tanveer







OPEN CITY

The city....open order, capable of continuous development... -Kevin Lynch, Image of the City

"what's missing in modern urbanism is a sense of time... the city understood as process... an urban imagination... formed by anticipation, friendly to surpise. "

-Richard Sennett, The Open City

"...time to capture the rhythms, a sort of mediation... allowing the unknown, the giant city, to be perceived or guessed at."

-Henri Lefebvre, Seen from the Window

Open City Studio was a playground of polychronic interventions, transforming and enlivening the genius loci of Winnipeg's central Old Market Square. This dense collage of warehouses, crooked streets and alleyways is vulnerable to gentrification, but remains the 2) a new Hybrid Parkade at a gateway location city's most definitive social and artistic core.

Working individually and in teams, Open City students "put the market back in market square." Weaving lively diversity into openings and thresholds, they transformed parking lots and alleyways into a porous labyrinth of parks, arcades, courtyards and passageways.

Within the splendid ruin of Maw's Garage (1909), students created a public market, overflowing with merchants and makers, light and shadow, sounds and smells, colorus and textures, food and crafts. Around this market they created architectural amenities where diverse communities can live, work, wander and play. EPISODE-1: In the first half of the term, students worked both individually and in three teams, devising:

1) a Master Plan creating a new pedestiran only core, connecting pedestrian and bicycle pathways with green space and an extended network of animated alleyways;

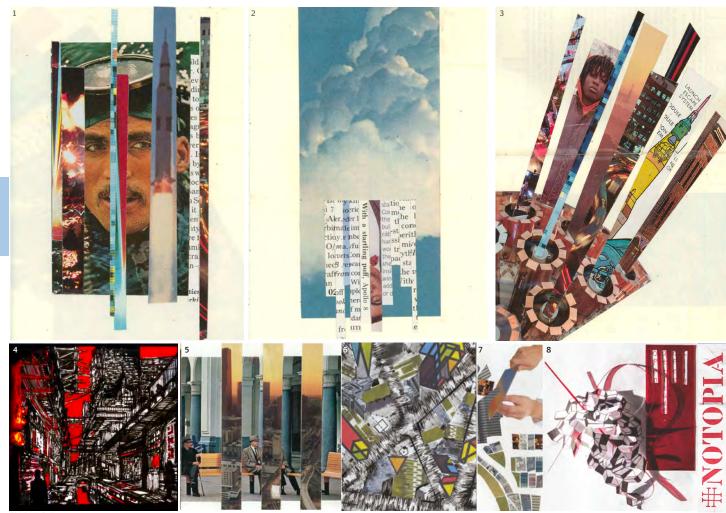
chosen by the students; and

3) a new public market called Maw's Market.

Within the new parkade, the market, the laneways and urban openings around Market Square, students designed small interventions: a curvy kiosk, a skateboard park, a graffiti friendly bus stop shelter, a 24 hour noodle shop, a telescoping bike repair shop, an origami array of market stalls, a gregarious recharging station, an aromatic brick-oven bakery, a blacksmith forge, a hybrid playground-sculpture park, a secret laneway gallery, and a kitchen with around-theworld cuisine, olfactory chimneys and a funky facade. EPISODE-2: After field-trips to Toronto and Berlin, students worked individually designing new or adapted

mixed-use buildings on infill sites, while extending the network of laneways, courtyards, and urban thresholds.

Student projects included: A recycled bookshop with offices around an atrium. An art museum with glass arcade and rooftop garden. A clinic with affordable housing and origami balconies. A bike shop with courtyard café and sky-lit apartments. A labyrinthine thermal spa with adjoining bookshop and eyewear boutique. A hostel with surprising red doors, a gigantic interactive map, a hidden courtyard and a bar. A maze-like ceramics workshop and gallery with cozy apartments. A public data center with flex offices, an umbilicus mundi atrium and exhibitions on espionage. A hotel for consensual lovers, with a tattoo parlour and gallery bar. A retro-neo-warehouse for vertical art and play, with a huge spiral stair. An art gallery with an amphitheatre, underground cabaret, alley catwalks and bridges. A sci-fi pizza arcade with rollercoaster booths and a fleet of flying drones serving the Open City.



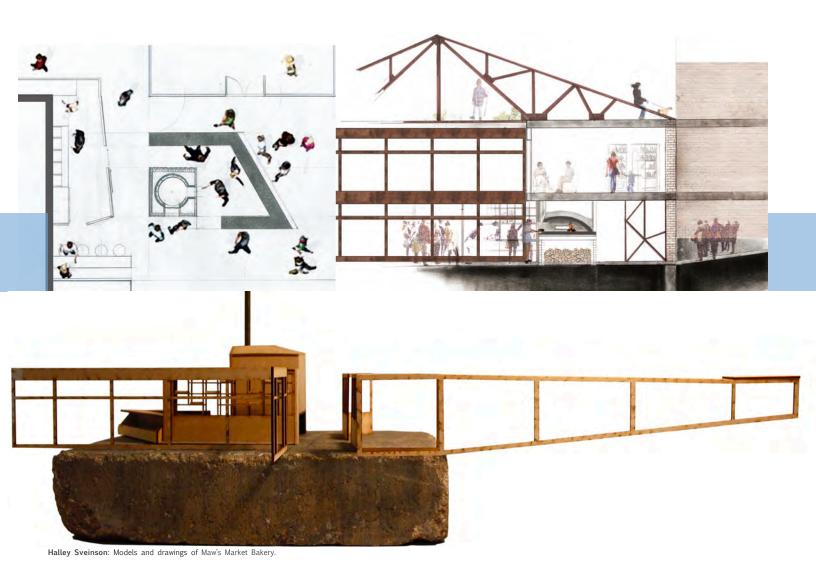
Editor-in-Chief The Architectural Review 69-77 Paul Street London EC2A 4NW United Kingdom

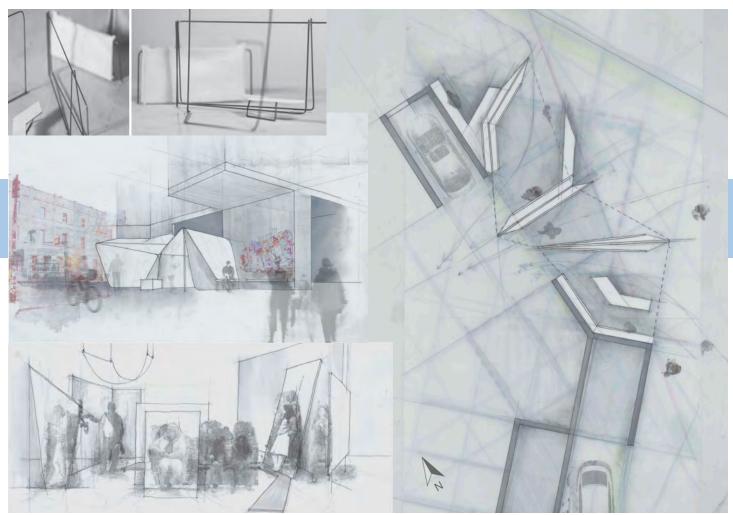


Master plan showing proposed network of pedestrianized streets, laneways and green space, with new Maw's Market (blue), Hybrid Parkade (orange), and student infill sites (red dots).

Meiyi Yang: graphite drawings and black and white photos.

 ${\bf Mateo\ Linares:\ colour\ photos\ of\ Graffiti\ Alley}.$

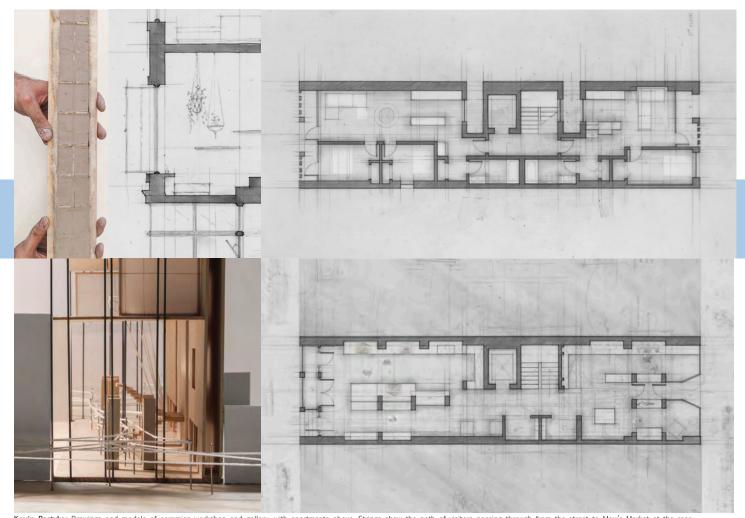




Kevin Partyka: Drawings and models of an interactive graffiti-friendly bus shelter. The installation also serves as an entrance to the Hybrid Parkade.



Kelli Wikland (top): Used books on display in a recycled bookshop gallery; (bottom): Secret laneway gallery between the Hybrid Parkade and Cre8ery warehouse.



Kevin Partyka: Drawings and models of ceramics workshop and gallery, with apartments above. Strings show the path of visitors passing through from the street to Maw's Market at the rear.



Meiyi Yang: Drawings and models for an art gallery, with an open air amphitheatre doubling as entry stairs over a cabaret theatre below. A suspended gallery connects - via alleyway catwalks and bridges - to artist studios located in warehouse buildings on either side of an alley leading directly to Maw's Market.



Mateo Linares: Drawings and models of a sci-fi pizza arcade, with roller-coaster booths and a fleet of flying drones delivering pizza and other packages to citizens of the Open City.



Ralph Stern

STUDIO: Nick Bava, Robyn Fossay, Andrew Fritschij, Teigan Harrison, Nathan Keebler, Mateo Linares, Kevin Partyka, Alena Rieger, Kelli Wiklund, Meiyi Yang, Luxia Yang THESIS: Rasna Madhur

Text by: Nathan Keebler, Ralph Stern

BERLIN STUDIO / STADT AM WASSER

The Berlin Studio explores a physical landscape that shares similarities with the landscape of Winnipeg: flat with a continuous riverfront intersecting the inner city. However, the socio-political history of Berlin mark it as unique in comparison with not only Winnipeg, but any North American city. By activating design through similarities and differences to Winnipeg, our critical understanding of context can be transformed through unfamiliarity just as much as through familiarity. The Berlin

Studio seeks to comprehend the forces that have brought Berlin to its current state, and poses possible futures through architectural intervention along the waterfront.

In the third iteration of the Berlin Studio, the thematic expression 'Stadt am Wasser' or 'City at the Waterfront' acts as the basis for exploration. As many architectural practices have moved towards collaborative-based design, group work was integrated into all phases of the one-semester design process. This allowed students to generate multi-scalar, hybrid building programs along the Spree River in the central area of Berlin. While some students embarked on the journey to Berlin in situ to gain a first-hand experience of the city, not all were able to join. The contrast of first-person with third-person experiences of the city created diverse narratives within each group's project. However, many concepts were integral to aligning all designs, and the projects all negotiated the historical, The Berlin Studio analyzes the historical, social, political, and economic components that generated the urbanity of Berlin; narrating architecture's permanence within a city of constant flux.

socio-economic, and political issues of the sites and beyond. These approaches addressed the scalar relationships between site, district, and the city.

Historically, Berlin was developed in relation to the Spree River as an element of infrastructure. With the river forming the nexus of movement through the city, its location remains central to the city and its growth. Explosive industrial growth fueled the rapid expansion of the city, complemented first by immigration from eastern Europe and, later, from countries such as Turkey, With the injection of different cultures into the city, districts not only form divides through invisible lines, but also in the cultural makeup and corresponding demographics.

Berlin was home to over four million inhabitants at the beginning of the 20th century, however the Second World War resulted in major destruction to the central portions of the city, causing mass population decline, and the city center left void. The Cold War further divided the city as the Berlin Wall created physical borders in the heart of Berlin. This divide was not only physical and political, but also mental: the center of a socio-political contest for visions of the future.

Once the Berlin Wall fell and the reunification of Germany occurred, tensions immediately arose on how best to utilize the void spaces left by the wall. This has engendered an oppositional discourse of capital interests versus the counter-cultural groups such as squats

and self-governing communities. These divisions of social, political, and economic ideologies have been present within the city for over a century, as the physical and ideological boundaries created by the Cold War have merely continued. Currently, the Mediaspree development and the refugee crisis from the Middle East have generated fierce discourse and protest as to how Berlin should best use its resources in utilizing the voids of its central districts. . Undeveloped spaces along the Spree are now being developed and commercialized as part of the Mediaspree label, which hopes to rebuild the city center through the investment of global capital. However, this has displaced much of the local culture, and these elements are resisting the forces of globalization and gentrification. With the displacement of low-income Berliners from these areas, it has made it difficult to find permanent housing for many, including refugees and their families. The integration of refugees within Berlin's core has been contested by many collectives holding varying opinions on how best the government should house the heavy influx of migrants. Architecture can serve as a critical response to these conditions, can facilitate a dialogue of Berlin as an inclusive city supporting the unity of its people, rather than dividing it further through new forms of marginalization and exclusion.

4 Sites, Located in Berlin, Germany, within the: Kruezberg-Freidrichshein, Kruezberg, and Mitte districts; one site located in former West Berlin, and three sites located in East Berlin.

4 Projects

- 1. CUVRYBRACHE- refugee housing, religion, and integration
- 2. HEIMAT- refugee integration, social housing, and education
- 3. NEW YAAM- master plan, artist studios, and housing
- 4. JEDDERMANSLAND- visual arts educational facility, with artistbased housing











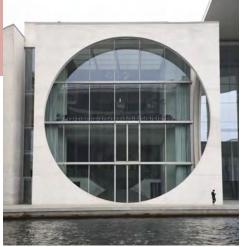


1-6, 8: Nathan Keebler - Photos of Berlin Trip, demonstrating the changes of scale and inhabitation within the city. 7: Ralph Stern - Photo of Berlin Trip students









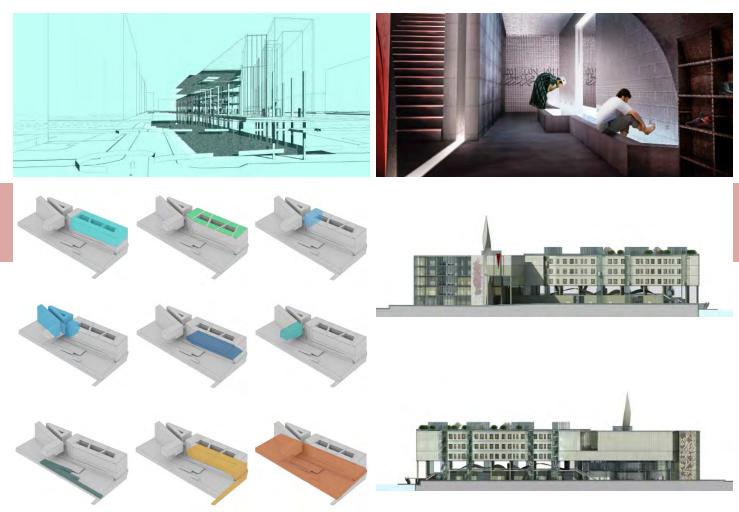




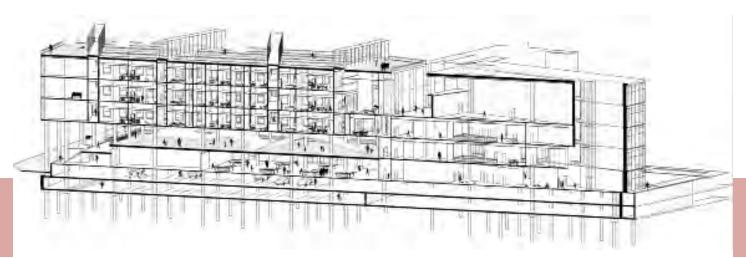




1-5: Cuvrybrache / Nick Bava, Andrew Fritschij, Mateo Linares - In Construction Diagram (1); Render of abultion area, a space of ritual cleansing in mosques (2); Programmatic Diagram (3); Northwest Elevation (4); Southeast Elevation (5)



1-4: Cuvrybrache / Nick Bava, Andrew Fritschij, Mateo Linares - Longitudinal Section Perspective (1); Nighttime view looking down Cuvry Strausse (2); Render of mosque area, depicting the mihrab, pointing towards Mecca (3); Sectional Model view of minaret (4)









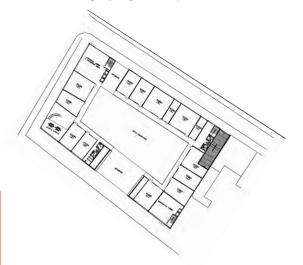


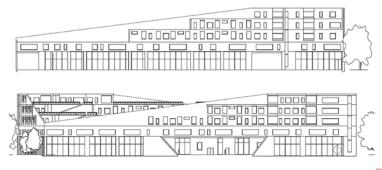






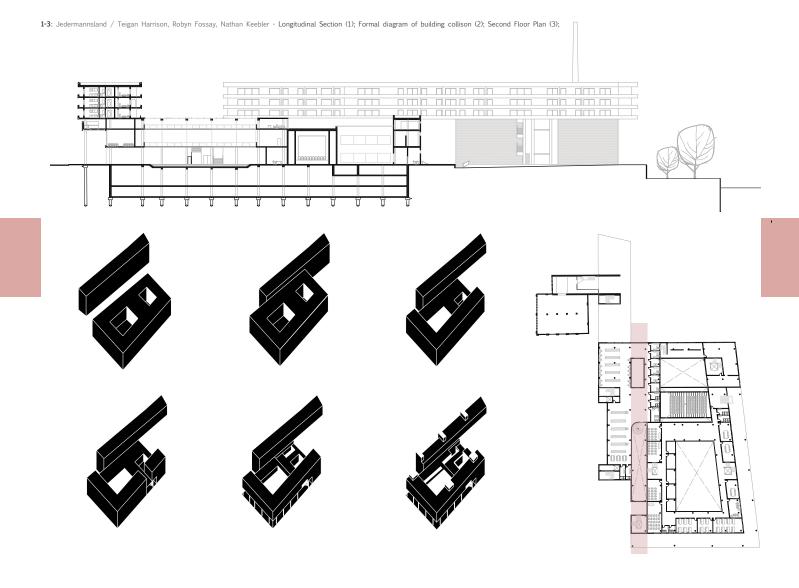








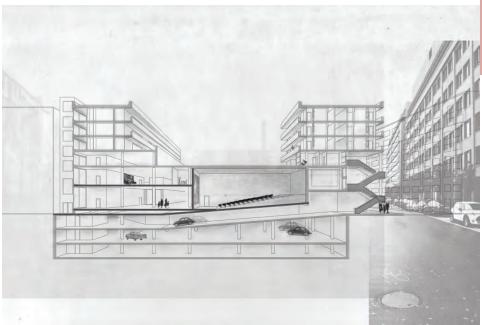














FORCE FIELDS:

TECHNOLOGIES AND TOPOLOGIES FOR SOCIAL CHANGE

Recently digital software and automated fabrication tools have been adopted to the field of architecture creating new capabilities for the architect and helping to create a closer relationship with the act of making as an integral role of designing. This has simultaneously opened up new opportunities for the practice while also re- The Immigration Integration & Community Farming orienting it back to pre-industrial design traditions, like the Arts and Crafts movement, which interlaced design with the exploratory expressions of craft through the shaping of material and assemblies. Yet as our profession becomes increasingly captivated by this new technological prowess, and the focus of professional discourse becomes preoccupied with how best to talk about and use these new capabilities, we risk losing sight of the larger task of our profession - to improve the human condition through building structures that better people's lives. This concern is not abstract or hyperbole, it refers to the collective consciousness of the profession that continually seeks to define and promote what meaningful and good design is in society.

For this studio, we began by considering Franklin's argument that context determines meaning in

"Technology is a multifaceted entity, it includes activities as well as a body of knowledge, structures as well as the act of structuring. Our language itself is quite poorly suited to explain the complexity of technological interactions. How does one speak about something that is both fish and water, means as well as ends? That is why I think it is better to examine limited settings where one can put technology in context because context is what matters most."

-Ursula Franklin in her lecture "The Real World of Technology"

technology, architecture and most things. Our aim was to produce a project that explores how architecture, through the use of specific technology, can positively impact the lives of a community in a particular site and context.

Community Coop (IIFCC), also known as the Rainbow Gardens, is a community garden located on the U of M campus that serves immigrant communities who live in the Central Park area of Winnipeg by providing land to garden and grow their own food. In collaboration with the Rainbow Gardens community, our studio examined the nature of the work carried out by community members on the site and responded to these needs through the design and construction of three types of structures. We also worked closely with the CISC to design steel framed structures that utilized the current tools and technologies to develop these design projects. The structures were designed to help provide for a range of needs - passive water catchment and collection for irrigation, secure tool storage, shaded rest areas and gathering spaces, an outdoor kitchen.

a compost washroom, community notice boards. and other amenities. The designs resulting from this studio were partially pre-assembled in the fall term. The remaining work was finished in an elective course carried out in the spring of 2017 when these structures were installed on site by the students.

Project Partners: Dr. Dimos Polyzois (Department of Civil Engineering) & Professor Brenda Brown (Department of Landscape Architecture)

Project Sponsors: Canadian Institute of Steel Construction (CISC); Sperling Industries; Shopost Steel; Assiniboine Credit Union; Barkman Concrete; Westman Steel: The Home Depot: Office of the Dean (Faculty of Architecture, Faculty of Engineering) (U of M); Faculty of Architecture Endowment Fund (U of M); Centre for Engineering Professional Practice and Engineering Education (U of M); The Department of Architecture (U of M); Friends of Engineering (U of M); The Partners Program (U of M); The Faculty of Architecture Fab Lab (U of M); The Centre for Architectural Structures and Technology (U of M)



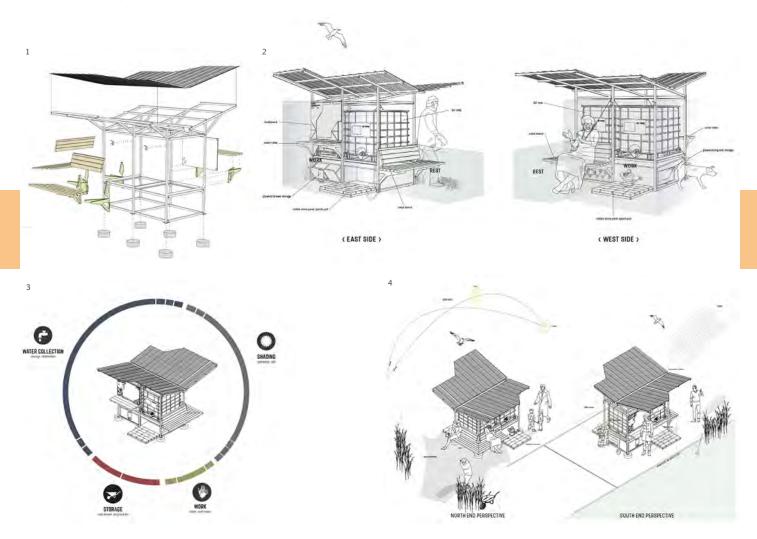












- 4: Amanda Reis Full scale mock up of the trusses (1); The group working (2);
 Steven Hung Testing the angle of the roof;
 5-8: Trevor Munroe Various images throughout the full scale build;









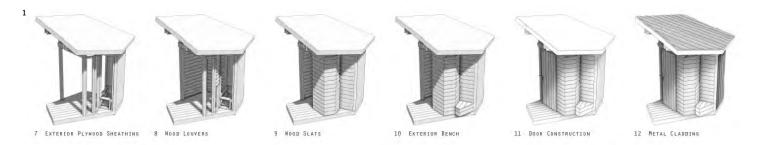










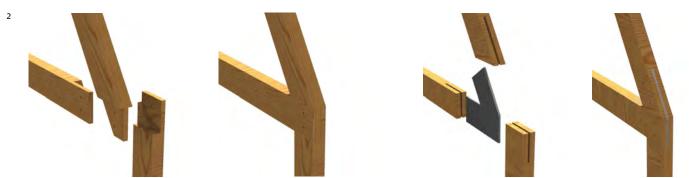






- 1: Steven Hung Group photo with the community members; 2: Trevor Munroe Connection details;







LIGHT & ZOUND/ SPACE & SPAN:

PRODUCTION AND COLLABORATION FACILITIES FOR ICELAND'S CREATIVE ECONOMY

Iceland has had a perilous economy in recent years, and is remaking itself in the 21st century as a centre for culture and creativity as well as a model for environmental sustainability. The dynamic and constantly The harbour front of Reykjavik is contested territory renewing cultural advance is driven largely by an intense creative sector. Artists, musicians, designers and docking for the Slysavarnafélagið Landsbjörg (National filmmakers have been the sub-text of modern Iceland. As politicians and bankers plot upheaval and disruption, gain headlines, and undermine economic stability - the creative sector has exposed the natural intellectual resources available and have dared to take control of their future. The vibrancy of the city of Reykjavik in consideration of its modest scale is astonishing. In support of culture the government has invested significantly in the Creative Economy. Supporting artists in all disciplines, including architecture, the evidence of success is clearly legible in the literature, graphic design, fashion design, music, and digital media. Major music festivals have anchored Iceland as a significant international cross-roads of musical exploration. Among The studio was taught in unison with the Advanced

"I try to make films about more than one thing at a time, because film is not supposed to be only about plot - it's supposed to be about emotions and subtext and the unexplainable as well ... it's supposed to be beautiful and ugly and sensitive at the same time"

- Rúnar Rúnarsson, Wróble / Sparrow [Interview, Bratislava International Film Festival 2015] https://www.youtube.com/watch?v=9f79h GvMWs

them, Iceland Airwaves, the Dark Nights Music Festival and Sonar Revkiavik are most dominant.

with a mixed program - working harbour and shipyard, Life-saving Association of Iceland), tourism and tour boats, transportation hub for the ferries, and entertainment. It is now poised to absorb intensive hotel and condominium development.

This design studio - with the principle protagonists - studio brief, field trip, the creative economy, light, legend and place - will draw students into a strange but rewarding dialogue with Reykjavik and its citizens as we explore the nature of innovation in a creative economy.

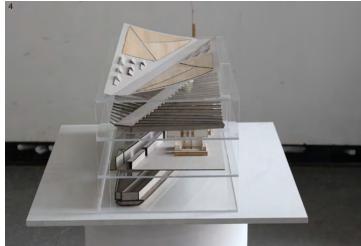
Studio at the Austin School of Architecture, U Texus, by Kevin Alter and Tanis Paul. The students included Emily Andrews, Ian Wright, LeAnna Burgin, Asher intebi, Alena Savera, William McCommon, Casev Tucker, Amy Payton, Shani Saul, Ashley Nguyen, Will Powell, Sydney Moore, and Joseph Broccoli-Hickey

The following are acknowledged as contributors to the studio and travel:

Ottó Einarsson, Travel Steve Christer, Studio Granda Sigurður Einarsson, Batteríið Björn Guðbrandsson, Arkis Sigurður Harðarson, Batteríið Magnús Jensson, Architect, Pagan Temple at Öskjuhlíð Hill, Reykjavík









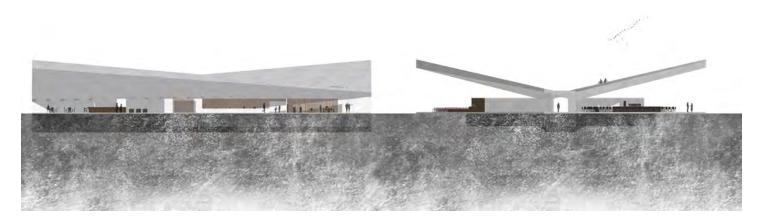




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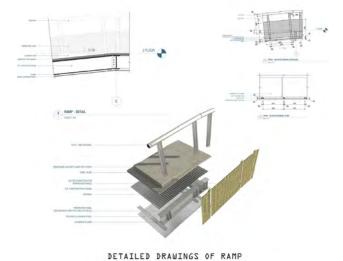






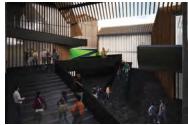


MOCK-UP DETAIL OF RAMP

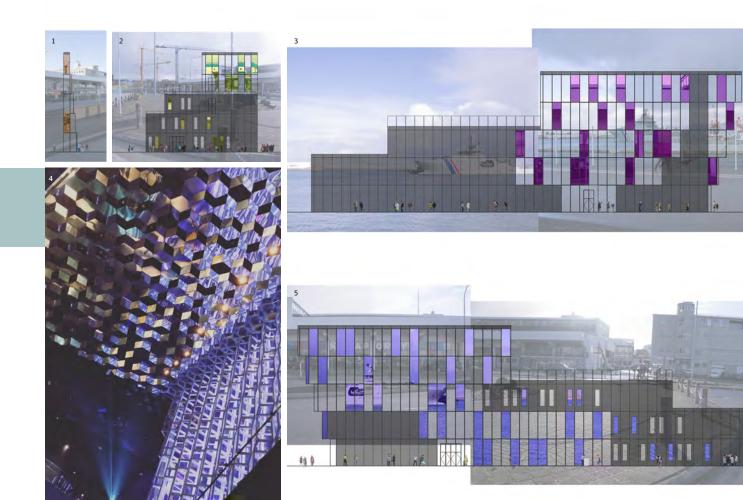












1 3 BUILDING SECTION SCALE: 3/32-1-0 CURTAN WALL TO CURTAN WALL DETAIL CONCRETE PANEL TO CONCRETE PANEL DETAIL WALL SECTION CONTRACTOR FOOTING DETAIL

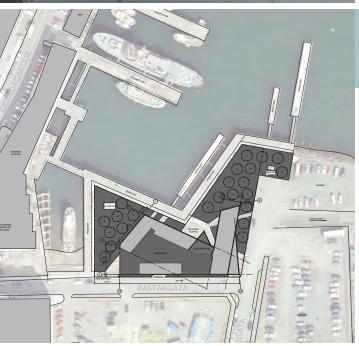


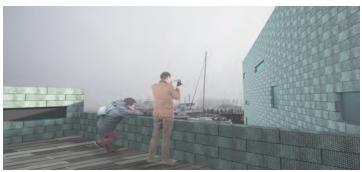






























M1 STUDIO: Venkata Revanth Anantha, Carlin Co. Marco Garcia, Yigiao Hao, Bryan He, Ojuvi Zhang, THESIS: Francis Garcia, Maryam Haghshenaslari, Yao Yao Li, Mitchell McIntosh, Stephanie Sewall.



RADICAL CAMPUS

What is a university? ... The desire to learn made the first school... The The institutions of learning institution became the modus operandi... The institution must stem from the will die when its inspirations are no longer felt... I undeniable feeling in all of say we must go back to the original inspirations that us of a desire to learn... caused our institutions to be institutions. - Louis Kahn

a great university should teach the art of agreeing, and what is perhaps most important — the art of disagreeing.

- Jorge Luis Borges, The Writer's Apprenticeship

This studio takes its name from Hugh Johnston's 2005 book Radical Campus: Makina Simon Fraser University. Founded in Burnaby, BC in 1965, Simon Fraser University (SFU) was radical for its majestic site atop a previously undeveloped mountain; for its visionary master plan by Canadian architect Arthur Erickson (with Geoffrey Massey); for the experimental pedagogy led by its young professors; for the revolutionary zeal of its students; and for the unprecedented speed at which the whole University was planned and built, moving from conception to manifestation in just 2.5 years, thus earning the tag "instant university."

All such radicalities animated this studio. But another "radical" element grounded the work, one that is latent in both Erickson's SFU design and Louis Kahn's message to students. Together with revolutionary extremes, "radical" implies something basic, intrinsic and deep-seated. The term derives from radicalis, Latin for "forming the root"—a life-sustaining agent. Like roots of a tree, that which is "radical" may be invisible to normal vision but nevertheless provides stability and vitality for healthy and exuberant existence.

This studio posed "radical" architectural, cultural and philosophical questions:

What is at the root of a thriving University? What are the roots of learning? What are the roots of wondering? What are the roots of architecture?

Beginning with these questions, students created heuristic devices. Heuristic implies finding and learning by trial and error, by both careful experiment and accidental discovery. Instead of following strict disciplinary methodologies, we began heuristically. Through a variety of hands-on modeling, drawing and installation experiments, students created conditions that engendered serendipitous Eurekas, illuminating accidents, effects and consequences. Our aim was to rediscover the delightful desire for learning and life.

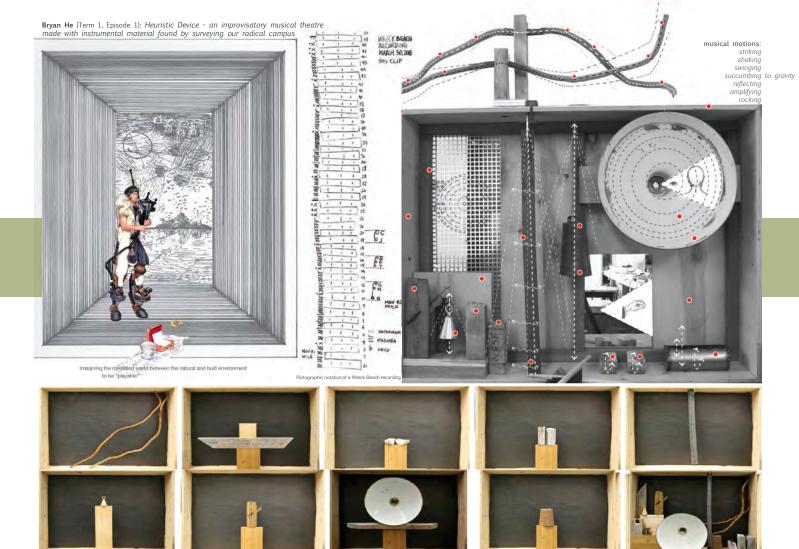
This studio included heuristic travel to Toronto, Ottawa and Montreal to visit the major universities embedded in these cities, and to spend time with the architects who are leading award-winning design projects on these campuses.

Returning to Winnipeg, we translated heuristic devices into heuristic chambers-experimental pilot projects for the University of Manitoba's Fort Garry Campus. Building on the 2016 Visionary (Re)Generation Master Plan, students identified sites and designed interventions to cultivate collective discovery, encouraging students, profs and publics alike to recover the roots of learning.

In the winter term, students comprehensively designed heuristic edifices. Collectively they manifested a radical vision for a more livable, luminous, experimental, tasty, tesellated and harmoniously cacophonous campus.

Throughout the year, students aimed to create campus architecture that is truly "radical"—revolutionary, visionary, urgent, artistically-vibrant, heuristically revelatory, democratically active, wondrously ludic, and rooted. Their work invites all of us to dig down deep, and (re)discover architectures of learning.

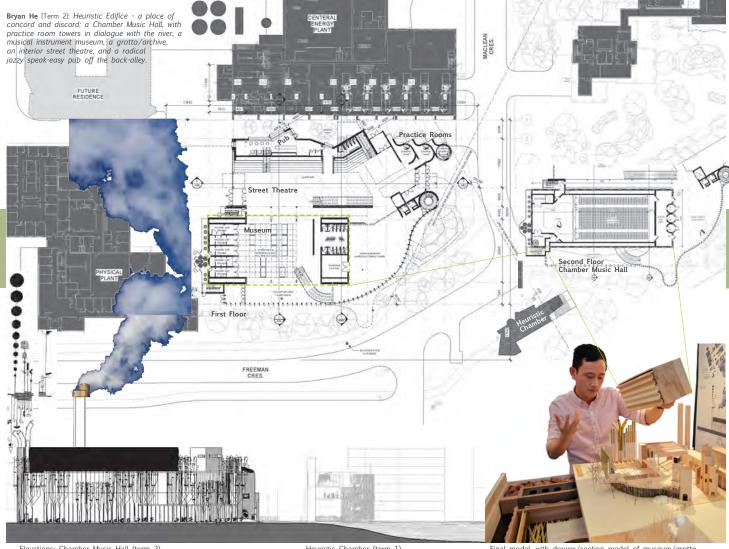
The serendipitous three-week strike of academic staff in November 2016 (depicted above), made the topics of this studio all the more radical and relevant.



Recordings of individual musical materials (assembled in the final symphonic device).

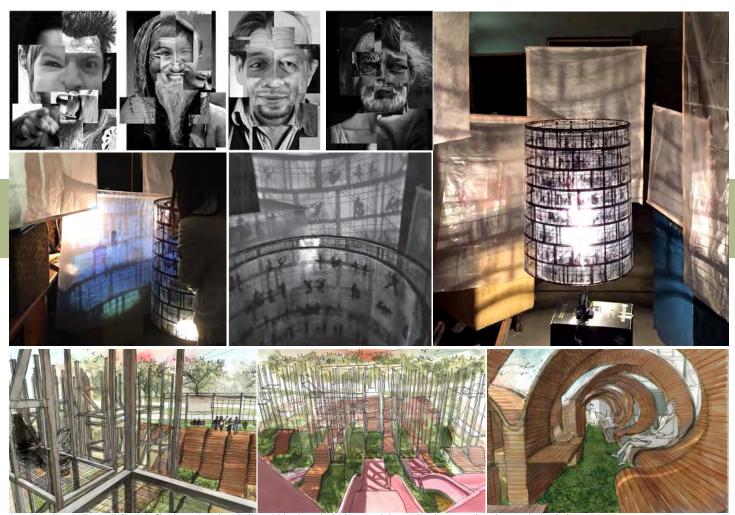
Bryan He [Term 1, Episode 3]: Heuristic Chamber - an inhabitable apparatus for jamming, performing, and composing - attuned to its setting at the bend in the Red River, with clay pot accoustic ceiling treatment inside; and designed to applify musical creations in either direction of the campus or the river.





Final model, with drawer/section model of museum/grotto.

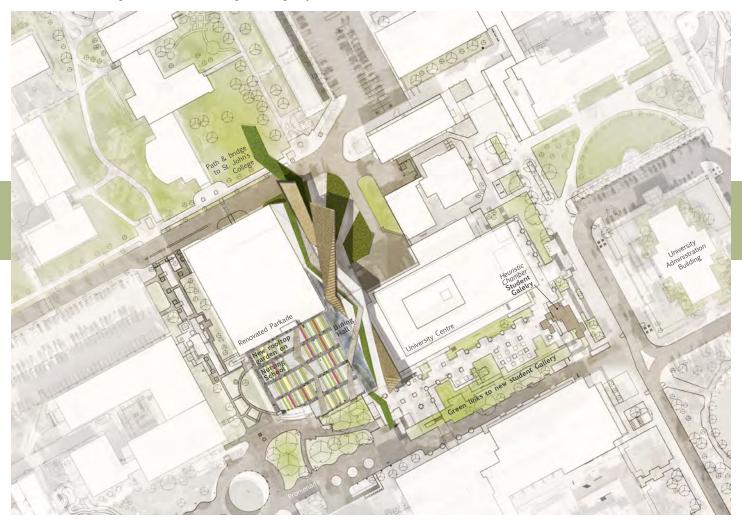




Quiyi Zhang [Term 1, Episode 3]: Heuristic Chamber - views through the social jungle to the landscape and river; and a place to study and snooze in the shade.



Yiqiao Hao [Term 2]: Heuristic Edifice - a new student dining hall in a found linear space between the university centre and nursing school, and between the central university promenade and its peripheral student residences - intertwining social and nutritional well being, with home-grown food and student-run kitchens.



Yiqiao Hao [Term 2]: Heuristic Edifice - a new student dining hall with adjacent roof garden, atrium study space, new links between campus buildings, and model exploring intertwinging architectural spaces and social interactions.



striving toward a 'degree zero'

LOGIC OF THE LIMIT

In her Harvard Design Magazine No. 15 Fall 2001 article, 'A Name, Then a Chair, Then a House', Beatriz Colomina posits that aspiring to be a really good architect necessitates clarity of vision and beliefs. She asserts that clarity can be revealed through the design of a house and chair [two projects with two

scales and relationships to the body].

She is, in my opinion, implying that in order to make strong, authored architecture one needs to be articulate about one's own beliefs and attitudes. I am of the mindset that this is necessary in order to make critical work.

Minuk studio focused on the development and distillation of a student's own beliefs in a series of related and sequential projects through the lens of a chapter in sequential Sola Morales book Differences. This chapter relies very heavily on philosopher Eugenio Trias' ideas around the logic of the limit.

Sola-Morales characterizes an architecture that defines itself by its proximity to the limit, striving toward a 'degree zero'. In discussing what establishes signification in this kind of work he discounts references that produce a predictable response or typological or figurative responses to historical architectures in favour

"Forged in the tension generated from the subject between the impossible and the necessary, another and different poetics develops itself: that which the philosopher Eugenio Trias has described as the logic of the limit."

of immediacy, directness, "perceptible by means of the synthetic experimentation of those that contemplate it."

In the studio, students designed and built a chair, and then applied their subjectivity identified in this project into a larger comprehensive project that included housing.

The Logic of the Limit studio utilizes 3 nonnegotiable beliefs and biases about architecture which will act as a larger frame for the work:

- (1) Sites have a poetic relationship to architecture: Non-mobile buildings have only one site. Architecture should serve to explain a situation or site. A well-chosen site holds a number of opportunities within it. Architecture should serve to link physically and poetically with the specific qualities and opportunities of the site and context.
- (2) Material qualities have meaning for architecture: Architecture is not disengaged from construction or superfluous to it.

(3) Architecture is understood in the phenomenal realm: Architecture is meaningful through experience and inhabitation. Architecture needs to serve people and becomes meaningful by people receiving it. This attitude relies less on 2 dimensional plans and elevations and more on constructing a 3 dimensional environment achieved by working though large models that can be inhabited. Striving for an architecture that is unable to be grasped by 2-3 publicity images or purely the visual realm but that acknowledges sound, smell, and touch as important perceptual and psychological considerations.

- 3 SITES
- 1. Winnipeg, Manitoba
- 2. Los Angeles, California
- 3. Lake Manitoba

FIEL DTRIP

1. Los Angeles, California

3 PROJECTS

- 1. Expose Biases through designing and building a chair
- 1a. Construct site subjectively
- 2. Comprehensive design project















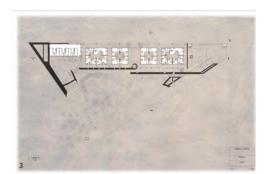


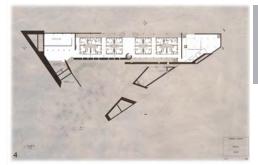


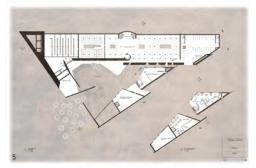














1 LONGITUDINAL SECTION NORTH



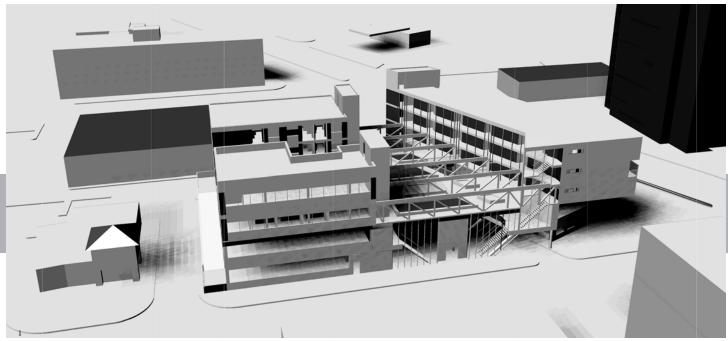
3 LONGITUDINAL SECTION COURTYARD



1













THESIS ADVISORS: Eduardo Aquino, Herb Enns, Ed Epp, Terri Fuglem, Johanna Hurme, Lisa Landrum, Neil Minuk, Ralph Stern, Carlos Rueda.

THESIS COMMITTEE: Lisa Landrum (Coordinator), Eduardo Aquino, Carlos Rueda.

THESIS STUDENTS: Emeil Alvarez, Erik Arnason, Emily Bews, Benjamin Bosiak, Michael Butterworth, Julia DeFelice, Francis Al-lain Garcia, Jonathan Granke, Maryam Haghshenaslari, Stefan Klassen, Yao Yao Li, Mingpeng Liu, Landon Lucyk, Rasna Madhur, Mitchell McIntosh, Emily Pawluk, Aaron Pollock, Evan Schellenberg, Stephanie Se-wall, Mackenzie Sinclair. Zaid Bin Tanyeer, Wei Xive. Jenn Yadblonowski.

DESIGN THESIS

Design Thesis is self-driven creative work motivated by architectural questions and curiosities, and developed through intensive material research and original design

explorations. Students produce a thoroughly resolved design project and book, compiling a year's worth of search & research, documentation of processes, iterations and the final design, plus a contextual framing, interpretive annotations and critical reflections.

A Design Thesis is both an end in itself and a new beginning: it culminates a professional architectural education, but also inaugurates new research directions. Design Thesis is a transformative event—a threshold that opens up new ways of engaging architecture, others and the world. Research interests and design ideas developed during this project will likely continue to evolve throughout one's career. An excellent thesis should not only open doors to good jobs, but can also launch independent practices capable of generating new knowledge and shaping society for the better. A great thesis may awaken the interest of peers, as well as local citizens (and even politicians), to exciting design possibilities. Thesis projects might develop new technologies, rediscover the persistent value of old ones; instill confidence in students to collaborate with designers around the world on topics of shared interest; and, in some cases, lead to further postprofessional or doctoral studies.

Carrying out self-directed design research and bringing this work to creative fruition are imperative skills for every kind of architect. While every design project should be propelled by individual inquiry, Design Thesis is a special opportunity for students to challenge themselves by pursuing architectural interests in ambitiously independent and self-critical ways, while working in the mutually supportive and challenging context of peers attempting the same. This year, thesis students had the opportunity to meet and converse with influential architects and architectural scholars, fostering focused dialogues between the students and professionals in regards to specific thesis projects. Discussions were had with Brigitte Shim, John Patkau and David Leatherbarrow.

The thesis year commences with a Design Research Studio led by a confluence of a student's own interests and a Thesis advisor's research and guidance. This first term is about articulating questions and attempting responses; finding topics of fascination and concern; defining the particular conditions, programs, sites, and/or phenomena to ground the work; developing appropriate exploratory strategies and manners of making; and meaningfully positioning the thesis inquiry in relation to existing research and relevant theoretical and cultural contexts. The first term culminates with significant attempts at architectural designs and design strategies, together with presentations of ongoing creative research in the form of diverse models and drawings, and potentially full-scale installations. supplementary videos and digital projections.

During the Winter Design Thesis term, students fully manifest a substantive architectural design project and produce a Design Thesis book. Throughout the year students benefit from discussion and criticism with advisors and peers, and have formal interim and final reviews with distinguished guests, including external examiners from other architecture schools in North America. In 2017 the external examiners were Jill Stoner and Howard Davies.

In the Department of Architecture, Design Thesis projects are as wonderfully diverse as its students. This year students explored a wide variety of architectural questions and themes, including: the city and its scale; architecture of place: new technologies; the role of storytelling in architecture; Indigeneity; rural identity; the architecture of a university campus; weak architecture: and the social implications of architecture, etc. Projects developed through a variety of constructional and representational explorations: full-scale building, experimental drawings and models, digital fabrication, and an array of hands-on media. The tradition of learning by doing and exploratory making is very much alive in our school. Students are encouraged to discover the most revealing and rewarding ways of pursuing their design inquiries.

ARCHITECTURE OF A LATENT CULTURE:

GROWING A PLACE OF MEMORY

In a world pressured by global influences and constant mobility, can individual cultures and regions continue to thrive? Some scholars believe that a strong locality depends on a combination of the unique conditions of the immediate place, the revival of ordinary but latent cultural practices, and the careful adoption of selected global influences. Local architecture is not an aesthetic style, but rather an all encompassing mindset. Regional architecture acts critically on the site and culture it is placed within, becoming a physical commentary of the surroundings. Through the thesis, it will be argued that locality depends on four key elements: the accumulation of history, the attunement to the site's characteristics, the participation or human interaction with the architecture, and finally the careful incorporation of global or standard aspects. The underlying objective of the thesis is the creation of a design process, one which can be applied to produce local architecture.

The method employed on the site first included an archeological study, next a process of rejuvenation through the creation of devices to prepare the site spiritually and physically for future development, and finally the design and implementation of usable structures.

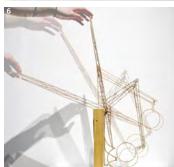




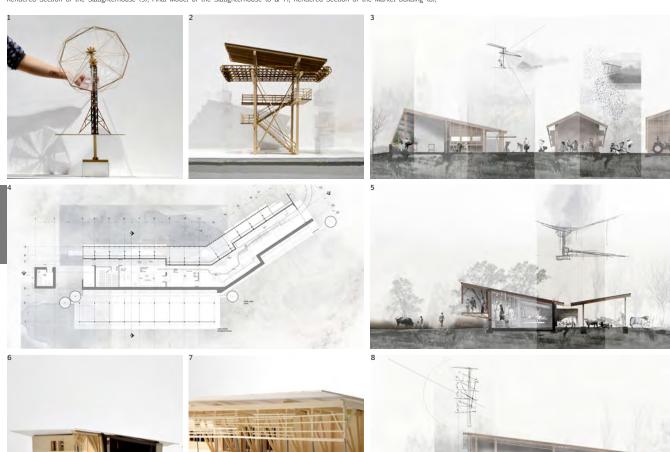


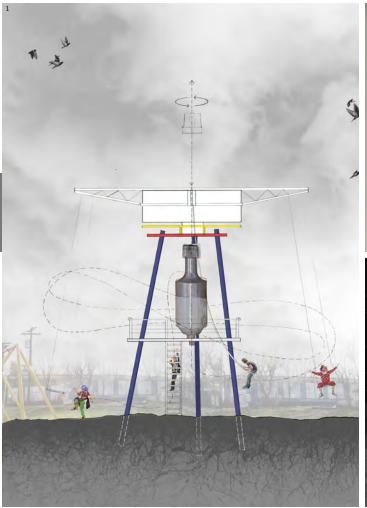




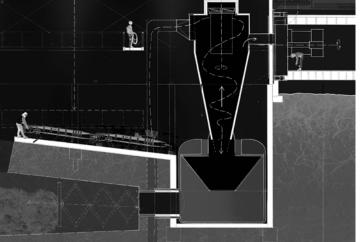


1-8: Emily Bews -Weather Vane Windmill Model (1); Model of the Rain Gauge Lookout Tower (2); Rendered Section of the Workshop Building (3); Plan of the Slaughterhouse (4); Rendered Section of the Slaughterhouse (5); Final Model of the Slaughterhouse (6 & 7); Rendered Section of the Market Building (8);



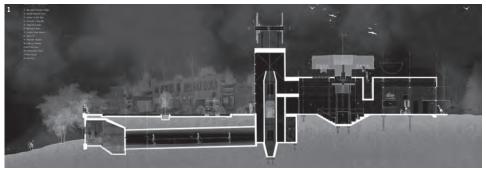






1-7: Evan Schellenberg - Section drawing of the Laundromat (1); Rendered sections of the Bath House (2 & 3); Rendered sections of the Central-Vac Station (4 & 5); Section drawings of the Laundromat (6 & 7);



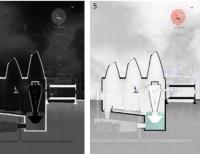














CLOWNMADE CITY: CONSTRUCTING THE OID

This project will investigate the architectural implications of aClownmade City. In a postindustrialized world that has forgotten how to play (except in an instrumental sense), can an architecture be created that does not narrow or delineate human activity, but instead promotes ideas of play between the wants, needs, and desires of its inhabitants? In Homo Ludens: A Study of the Play-Element in Culture, Johan Huizinga defines play as an essential activity in flourishing societies 1. Play is not only a key element in unlocking our imagination, but also in how we interact with the world around us. However, it is evident, post industrialization, that we as a society are losing our ability to play when exploring new ways to physically engage our urban environment. This project seeks to explore and better understand how notions of play can be used as both tools for the design process and as architectural elements that will allow individuals to engage the urban environment in more meaningful ways. This project recognizes that the invitation to play, is to enter into and experience an autonomous world that is subject to its own rules and logic,2 and seeks to better understand how these experiences can help, envision, shape, and construct architectural space. The clown or trickster will act as a guide to these notions of play, as he/ she has long been a student of human behavior and is a key character in engaging society in serious play.3Architecturally, this work will be explored through the invention of several improvisational structures and architectural interventions that will react to the characters, situations, and rules that are inherent in a particular place, while also exploring how the serious play of the modern clown can engage, experiment, and explore ideals of architecture, time and space.

¹⁾ Huizinga, J., Homo Ludens , London: Routledge and Kegan Paul, 1944.

²⁾ Boyarsky, N. 2016, Serious play. A deltiology of practice, Doctor of Philosophy (PhD), Architecture and Design, RMIT University. (p. 16)

³⁾ Peacock, Louise. Serious Play: Modern Clown Performance. Bristol, UK: Intellect, 2009.

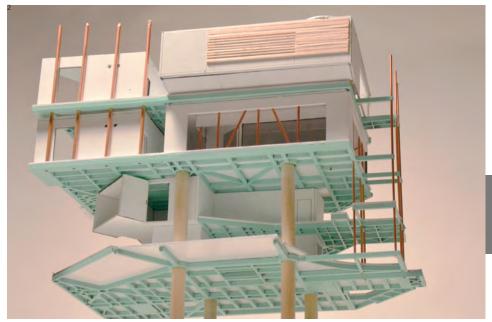


1

IN ABSENTIA

This proposal culminates with an offshore research facility for the monitoring of wave harvesting devices and their surrounding ecosystem. Ultimately, I deployed a series of hypothetical drawings and models in order to investigate notions of scale, culture, and context. Together, these inquiries examine how an unacquainted site could be critically and evocatively engaged. The constructs established by the initial inquiries provided the foundations for a hydraulics research and testing facility situated near Point Conception, California.

The intent of this thesis is to discover how a situated and engaged design process can compensate for one's physical absence. Ultimately, I am questioning how architecture can be used as a platform for evaluating current cultural and climactic trends. The underlying belief of this project is that Architecture should not be sterile, innocuous and confined; it should dare us to question, reconsider and progress. This thesis pursues a critical design process in which the dreams of the student can propagate in absentia.



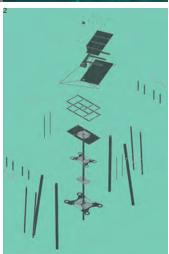






STUDENT NAME: MACKENZIE SINCLAIR THESIS ADVISOR: EDUARDO AQUINO





1-5: Mac Sinclair - Conceptual analysis of offshore oil platforms (1); Exploded axonometric of the drawing of the site stool (2); Model of the Experimental Hydraulics Test Facility (3); Conceptual renders of the Oceanic Research Station (4) (5);







STUDENT NAME: ERIK ARNASON THESIS ADVISOR: EDUARDO AQUINO 1-5: Erik Arnason - Render of the Moving Gallery (1); Interior of the Moving Gallery (2 & 3); Exterior of the built Moving Gallery (4); Scale model of the Moving Gallery (5);



SOFT.FIRM

Moving Gallery developed from the schematic concept for Day House, a small artist studio. The design essence of the project remained the same, but programming and site conditions changed. Day House was conceived as a simple framework that allowed light modulating screen walls to be shifted by the inhabitant to create the conditions of their choosing. It was a balance of intimacy and openness.

No longer only a work space for visiting artists, the Moving Gallery would be a small space designed to shift between a gallery to display artists work, or back to its original program as a work space. The project would be a mobile building, capable of being pulled by a half-ton truck and therefore have no site in the conventional sense. Following this shift, what remained unchanged was the spirit of the project: through the subtle modulation of light and the uncluttered simplicity of the space, an atmosphere of significance and beauty would emerge.

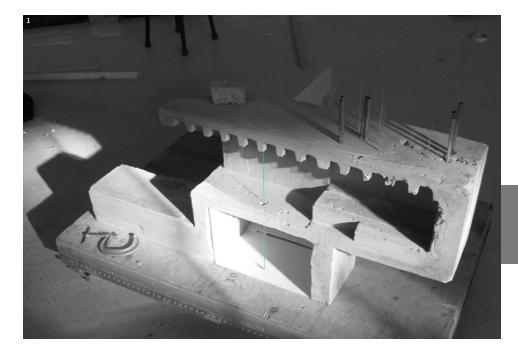
It was important for soft.FIRM that the project maintain the sense of openness and undefined purpose that Day House was imagined to have- the was never solely a Gallery, but a space that invited one to imagine myriad possibility and was not overly proscriptive.





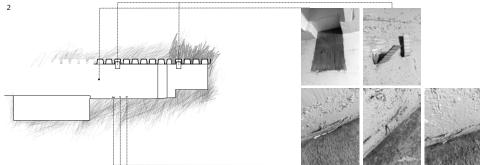






Hiding Place was a culmination of the ideas explored in the [step 2] projects, focusing on observation and adaptation. The intention of the project was to relocate the experimentation from paper space and the imagination to a physical environment at a 1:1 scale; a terrain vague. Through a slow process of inhabitation, primarily observationmapping the site, drawing and modeling it, the space would be transformed through the sediment of meaning that built up within it and through slow deliberate imperceptible alterations.

The project unfolded in through progressive levels of inhabitation and transformation of the space. The original concept of physically transforming the space slowly dissolved in favor of a psychic form of inhabitation, altering the space through critical discussion and apprehension.









MEMORY AND IMAGINATION

Memory And Imagination: A Chinese theatre for Winnipeg

This thesis explores the role architecture plays in cultivating cultural identity and involvement. The focus is Winnipeg's Chinatown. The goal was to revitalize this area through a theatre design and urban scheme informed by studying the origins of Chinese theatre as both a social and ritual force.

The thesis began by researching the Jinli Theatre in Chengdu, originally established in the Qin Dynasty (221-208 BCE). This gateway theatre is elevated above a passageway leading to a ritual centre. Its stage faces a busy pedestrian commercial square. Early thesis explorations examined the spatial complexity and vitality of this unique site, through animated models, drawings, movement, light and shadow studies. The Jinli theatre is interesting, because when it is not in use, it becomes assimilated into the commerical environment. The goal of this thesis was to design a theatre that could be similarly assertive and recessive. The project developed by interpreting these conditions and ultimately proposing an urban scheme intermingling commercial and theatrical spaces, as well as prosaic and ritual modes of social exchange.

The master plan envisioned a distributed series of commercial kiosks, temporary seasonal theatres, a meadering urban park and permeable market place – active day and night. The main theatre building has stages opening to the exterior, as well as rehearsal and production spaces for making theatrical props, costumes and sets. The design aims to provoke memories of China's theatre traditions by reimagining the urban topography - giving visitors a place for shopping, socializing, remembering, dramatizing and dreaming.

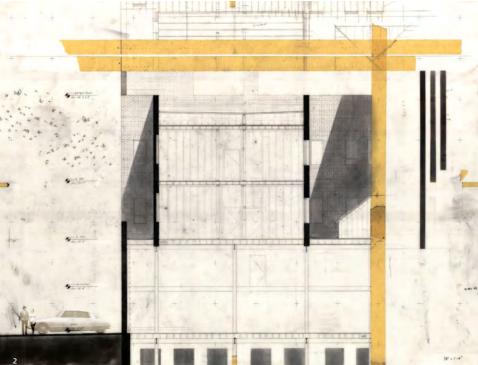


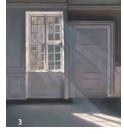




ARCHITECTURE'S ELUSIVE EDGE

This thesis has its origins in a fascination for abandoned environments and their phenomenal condition of tension, in that they are viscerally familial and yet cerebrally distant, teasingly just of reach. I have entitled this phenomenal condition the Elusive Edge and it is this thesis' broad intention to develop an architecture within this conceptual framework of veiled complexity. All objects, whether it be the frost that takes possession of a window pane or the scratches and surface complexities of a well-worn floor, have qualities that are immediately available to perception but also contain qualities that are withdrawn from our immediate access, a secret half-life, perhaps never to be revealed.1 As such, this thesis then asks the question of how we can identify, accumulate and extract the latent design potentials hidden within the seemingly obsolescent and conventional objects we so often disregard? What forms of speculative design material can we amass via a more sensitive reading of the conventional objects and environments of the everyday? How can we implicate such elusive and embedded design material such that it can inform the creation of new worlds of perception, that challenge and speculate on our societies conventional cognizance and valuation of the real?









STUDENT NAME: MICHAEL BUTTERWORTH THESIS ADVISOR: NEIL MINUK





- 1-3: Michael Butterworth Qualitative Perspective Drawings (1)(2); Section Drawing (3) 4-6: Michael Butterworth Basement Plan (4); Main Floor Plan (5); Upper Floor Plan (6)

















CULTIVATING CLOUD: AN ARCHITECTURAL GUAN XIANG OF SHANSHUI

This project is driven by my interest in cloud observation. The volume of cloud changes its forms and colors with wind and light dramatically and minutely, which lets you enjoy the sublime of the sky. The cloud is already woven into the fabric of the city and becomes part of our everyday life. I am interested in the relationship between cloud and painting especially Chinese traditional landscape painting which is what we call Shan Shui. Through the observation of phenomenon of clouds, I take clouds as an imaginary matter for a lazy modeler and help me to draw the dream of transformation. Painting is associated with gain from an invention that enables the painter to find inspiration in the changing forms of the clouds.1 In clouds elusive emptiness in Shan Shui, one sees many of the features of mountains and water courses hiding there. The Shan Shui painting is a game of cloud. An important standard for Shan Shui which is Qi Yun Sheng Dong. The Qi is breath. Qi Yun Sheng Dong means the harmony of breath is precisely the movement of life or rhythmical vitality.2 There are four representations of Qi in Shan Shui, which are nothingness, distance, gesture or portent and circulation.

The distance is quite important. The purpose of distance is not only the representation of spatial depth but also to bring your mind from matter to infinite distance and imagination. It is the product of the interaction between matter and nothingness.3 The cloud as a medium bridges the matter and nothingness and brings your mind from limited space to infinite. Two methodologies will be used in the research process. One is chance and the other is Guan Xiang. Guan Xiang is the method that the painter uses to draw Shan Shui. It is not only the way to view but also the way to experience, to read, to represent, to construct and to imagine. All those ideas will contribute to the final project, a high-rise apartment, for exploring the relationship between Shan Shui and architecture; for inquiring if an architecture could be cultivated from the laboratory of Shan Shui.

¹ Hubert Damisch, A Theory of /Cloud/ (Stanford: Stanford University Press, 2002), 35 2 Damisch, A Theory of /Cloud/, 214 3 Zeng YanHig, 'The Influence of Qi in Shan Shui in Song Dyansty', Master Thesis, Nan Hua University,





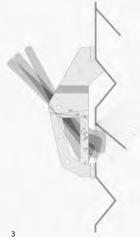
TN-BFTHFFN IMAGINING AND MAKING

This thesis is interested in exploring the condition between imagining and making; drawing and construction. The moment in which an idea is translated into a built environment. Typically, building is the last stage in a project that is carried out by contractors on site. An architect creates a set of two-dimensional drawings and specifications which is then translated into a built environment. Today, architects have begun to lose control of this condition. A lot of the time the built environment tends to be very different than what was originally conceived. How can we propose a method of working that begins to regain control of this condition? This thesis will discover ways of combining and overlapping the process of drawing, modeling and making.

Making has been something that has always been fascinating to me. However, it is not solely the act of building that interests me. To build; one has to acknowledge the properties and limitations of the material. Although this can create limitations and restrictions, I believe once critically worked through; this can create new opportunities and ways of working. I am inspired by Sixteen Makers way of working developed during their project 55/02. Instead of starting schematic design with a set of drawings; they conceived and explored the potentials of the piece in the workshop. Working with the material at a 1:1 scale and the tools used to fabricate it. Instead of building being the last stage in a project; completed by a contractor on site, how can we activate the role of making in the way we practice? To study this inquiry a series of building components and instruments were constructed to activate the role of making when one engages the site context.











PRACTICING ADAPTATION

Delta Beach and Marsh is located at the southern edge of Lake Manitoba. Delta exists as an ever-shifting and fiercely fragile ecosystem and prairie landscape. The thesis will explore notions of adaptation in relation to the architectural process. Delta is a site rich in natural, transformative cycles and phenomena that evolve with time. A design framework where adaptation is the central focus - proposes a way of practicing architecture that will re-examine and re-evaluate how to design with a landscape and site, rather than work against it. An intervention for the delicate site proposes that adaptability may provide permanence through its design of impermanence and flexibility. The thesis will propose a mixed program of research station, mobile pods, and community space. The proposal will offer a building that responds to the natural conditions of the site, and enhance and promote local and regional culture.



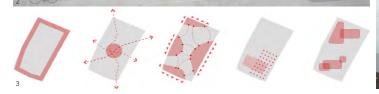


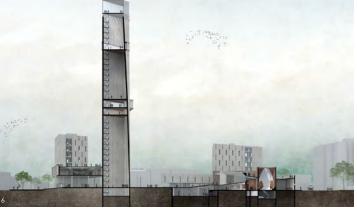








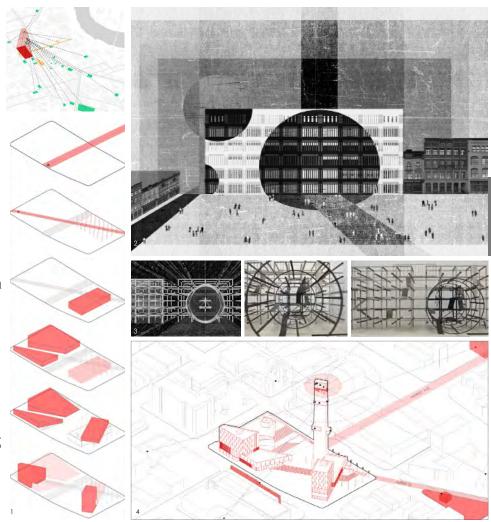


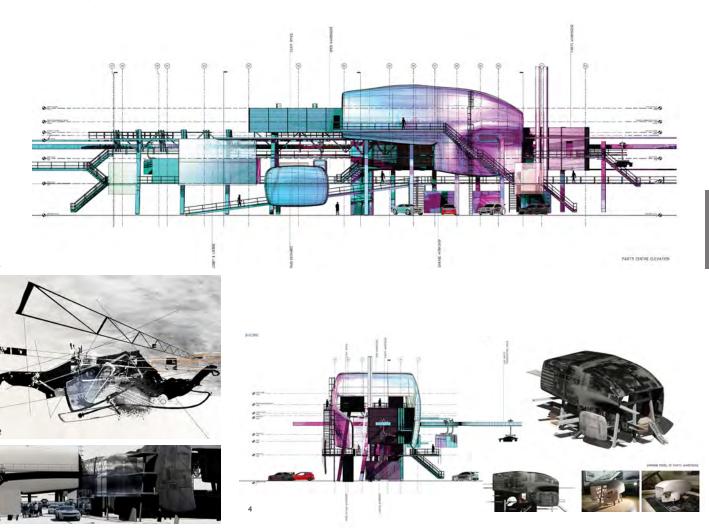


THE DISAPPEARED **PRESENCE**

This design thesis is an exploration of the relationship between architectural space and its narrative content as it is relevant to its physical, cultural and experiential context. The proposal intends to scrutinize various ways of communicating narrative through architectural elements, spaces and design strategies, and how they can promote a formal language, which might carry ideas and thoughts through buildings and spaces.

In this project, the notion of the architectural narrative is applied to the site of Winnipeg's Old Market in the Exchange District. The site currently houses the Public Safety Building (PSB), which is set to be demolished in the near future. There are many visions for this meaningful site. Although it is a new intervention, but this project intends to subvert the typical tabula rasa approach by proposing the intervention that speaks to existing narratives while suggesting inventive resolutions. At times its architecture discreetly recedes as backdrop for the events taking place; other times it stands out and plays a more crucial role in service to the narrative. The project underpins elements of the past that have played a substantial role in developing the contextual narrative of the site and (re) uses those elements to create a language that narrates the presence of the past in transit to the future to come.





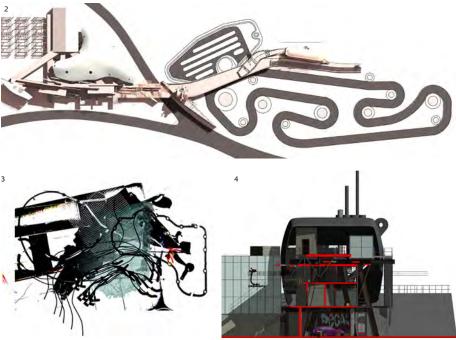


JUS GIVEN'ER

"City is undergoing a dual process: its centrality imploded, and its outskirts exploded on surrounding areas through the urban fabric . Central concepts of contemporary life such as politics, civilization, and citizenship derive from the city's form and social organization. Urban-industrial processes impose themselves over virtually all social space, in contemporary extended urbanization, bearing with it the seeds of the transformation." (Lefèbvre, H. The Urban Revolution University of Minnesota 2003)

This project focuses on transforming an industrial facility located on the frontier of urbanization into a more compact, revitalized, and heterogeneous place by introducing the social, cultural, and economic activities, for serving both the local industrial activity and encouraging the industrial district become more accessible and desirable in the urbanization movement.

Inspired by what Lefebvre conceived of an urban utopia characterized by self-determination, individual creativity, and authentic social relationships, my project, in this context, is designed to be an investigation and to practice the concept of space-time with "each place and each moment existing only within a whole urban, through contrasts and oppositions that connect it to, and distinguish it from, other places and moments" (Lefèbvre, H. Daily life in the modern world Athlone Press 2002)



TOPIC ADVANCED TECHNOLOGY

Ted Landrum

STUDENTS: M1 Revanth Anantha, Carlin Co. Yigiao Hao. Melanie Man-Yun Yau, Erin Riediger, Tyler Sample Jillian Teterenko, Qiuyi Zhang; M2 Mingpeng Liu, Mitchell McIntosh ... you can make a joint that's so magnificent that joint-making (and the joint) is the beginning of ornament...What you can lift as one thing should be something that motivates the whole idea of making a single thing which comes together with another single thing.

- Louis Kahn, Silence and Light (1969)

HANDS ON You say to brick, 'What do you want, brick?' And brick says to you, 'I like an arch.'

MASONRY And you say to brick, 'Look, I want one too, but arches are expensive... What do you think of that, brick?'

> Brick says, 'I like an arch.' - Louis Kahn Lecture at Pratt (1973)

The history of architecture is virtually synonymous with the history of masonry. For this reason, a course on masonry cannot avoid a long span of exemplary projects and methods. In Hands on Masonry students cover-and therefore discover-how the continual mixing of innovation and tradition is the essence and strength of any living tradition. This is true of architecture in general, but is perhaps especially true of masonry.

As the name suggests, students in this course gain a mix of direct experiences. They get their hands on physical samples and installations. They participate in a brick-laying, archbuilding workshop, where they also learn - from inspecting full size mock-ups - the difference between load-bearing masonry and insulated cavity wall construction. They take photos and charcoal rubbings of intricate masonry details on campus. They take a mind-blowing, ear-shattering, eyepopping tour of the local Tyndall Stone quarry, where they get close (but not too close) to monstrous diamondtoothed, water-splashing, stone-cutting devices, and visit the relatively calm drafting office-where meticulous shop drawings are made. Students meet with diverse experts. They also get their hands on intense reading material, covering the inspiring history and potential future of masonry. Students conduct research on exemplary masonry precedents, and a plethora of techniques and concepts. They craft and share detailed presentations, and they assemble a final masonry booklet, gathering highlights of all they've learned about masonry into a single well made artifact.

This course benefits from support from the Manitoba Masonry Institute and Red River College.















1) Cyclopean Masonry, Sanctuary of Delphi, Greece 6th c. BCE; 2) Undulating Brick, UTC-3, Sidney Australia, Frank Gehry 2015; 3) 3D Hex Panel, Brian Peters, Design Lab Workshop, Kent State 2013-2017; 4) Ningbo History Museum, Amateur Architecture Studio, Ningbo China 2012; 5) Hands on Masonry Workshop at Red River College.

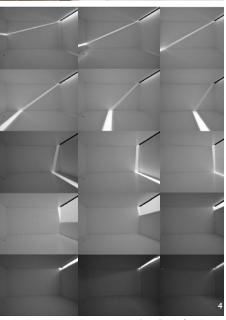
What light makes casts a shadow and the shadow belongs to light... - Louis Kahn, Silence and Light (1968)

For the rest of my life I will reflect on what light is.

- Albert Einstein (1951)







1) Lucas Harle, diffuse light studies; 2-3) Stefan Klassen, light tunnel model and coloured lighting effects, inspired by Peter Zumthor's hollowing strategy - bringing light and colour deep inside a space; 4) Zaid Bin Tanveer, study of refractive light and movement.

ADVANCED TECHNOLOGY TOPIC

Ted Landrum

STUDENTS: M1 Thomas Crossman, Yigiao Hao, Lucas Harle, Bryan He, Matthew Woloschiniwsky, Qiuyi Zhang; M2 Emeil Alvarez, Zaid Bin Tanveer, Ben Bosiak, Francis Garcia, Maryam Haghshenaslari, Stefan Klassen, Emily Pawluk.

LIGHTING & a parasol to throw a shadow on the earth, and in SHADOWS we put together a house.

ARCHITECTURAL In making for ourselves a place to live, we first spread the pale light of the shadow

-Jun'ichiro Tanizaki, In Praise of Shadows

Lighting is one of the most interesting, poetic and fun facets of architecture. Slight changes in lighting can dramatically transform the atmosphere, perception and experience of a place. There can be no light without shadow; no shadow without light. Without the depth and definition of shade and shadow we cannot perceive the edges, shapes, volumes, textures, and qualities of any surface, any object, any space or place. Furthermore, as Louis Kahn understood, all materials are "spent light."

In this course, students discover new ways of exploring lighting as an integral element in architecture and design development. Students study the exemplary light and shadow play of artists and architects. They also meet with experts in lighting, and have a chance to inspect contemporary lamping equipment. Students visit local sights where daylighting is crucial to the architecture, and meet with architects involved in the design decisions. Students learn fundamentals of how to construct solar path diagrams with a gnomon. They rediscover architectural implications of the solstice and equinox, and solar orientation. Students learn about lighting concepts and vocabulary, units of measuring light, and methods for modelling light digitally and physically. Students are exposed to a wide array of literature on the subject, both technical and theoretical. Throughout the course students work on their own light and shadow experiments, building 1:20 scale models of lighting conditions, studied through careful iterations and photography (depicted here). Students gather highlights from all they've learned in this course in a final Light and Shadow Book, illuminating the depth of their discoveries.

TOPIC HISTORY+THEORY

The fundamental job of the imagination... is to produce, out of the society we have to live in, a vision of the society we want to live in.

-Northrop Frye, The Educated Imagination (1963), 86.

Lisa Landrum

STUDENTS: MI Carlin Co, Yiqiao Hao, Amanda Reis, Erin Riediger, Olena Struk, Jillian Teterenko, Man-Yun Yau, Qiuyi Zhang; M2 Emeil Alvarez, Yao Yao Li, Mitchell McIntosh, Stephanie Sewall, Jennifer Yablonowski.





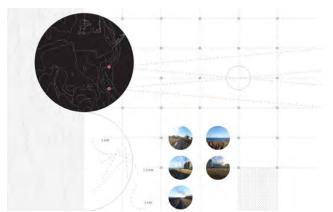
TOP (left): Yao Yao Li, A Palimpsest of Fragments & Memories in Winnipeg's Chinatown; BOTTOM: Jennifer Yablonowski, Naturally Artificial Boundaries of Lake Manitoba's Delta Marsh (detail).

VARIETIES OF ARCHITECTURAL IMAGINATION

Imaginative capability, vital for any human being, is fundamental for every kind of architect. While few would deny that imagination is a necessary and powerful tool of architectural invention, less thought is given to the varieties of imagination most conducive to architectural work. Even more difficult is understanding how our imaginative faculty functions in the first place. For is it not a phenomenon akin to magic? -as Jean-Paul Sartre (among others) believed. But even Sartre. a notorious lover of existential ambiguities, endeavored to clarify what the magic of imagination entails.

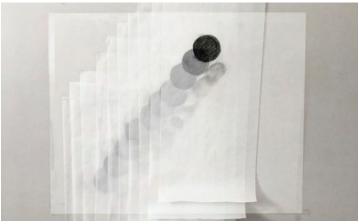
This seminar explored imagination's variety, so as to make our understanding of its workings more richly nuanced and our engagement with its revelatory and generative powers more comprehensive Discussion and profound. revolved around a set of provocative texts gathered from a trio of perspectives: architects, architectural thinker-teachers

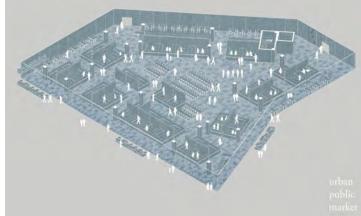
HISTORY+THEORY TOPIC



and philosopher-poets. Each set of texts illuminated interdependent modes of architectural imagination under study: collective; ethical, ecological, embodied, spatial, narrative, material and tectonic imagination. We also engaged personal imagination, by sharing fascinations and insights; representational imagination, via presentations, demonstrations and the making of compelling images; and linguistic imagination, by inventing lucid and figurative language to communicate desires and discoveries. Grounded in architectural history and theory, this seminar also studied exemplary architectural projects of the 20th and 21th centuries. Words exploring the universe of imagination orbited around tangible works, and thinking was engaged as a palpable and influential form of making and doing.

In addition to a presentation and writing assignment, students interpreted and composed poetic images, as a form of research and revelation.





TOP: Amanda Reis, Icelandic Topographies (detail); BOTTOM (Left): Olena Struck, Layered Drawing. BOTTOM (Right) Emeil Alvarez, Urban Public Market (Axonometric Plan).

TOPIC HISTORY+THEORY

Lawrence Bird

STUDENTS: Emeil Alvarez, Francis Garcia, Marco Garcia, Jin Long He, Stefan Klassen, Mitchell McIntosh, Emily Pawluk, Erin Riediger, Tyler Sample, Ryan Van Belleghem, Man-Yun Yau, Qiuyi Zhang, Mingpen Liu



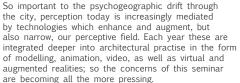






DIGITAL PSYCHOGE-OGRAPHY

This seminar explored the legacy of Guy Debord and Situationism, rethinking their critique of the modern city from the standpoint of our own, with a focus on mediated forms of perception.



Can our contemporary tools of perception (and the representational environments generated out of them) help us dwell authentically and actively in the city, or do they offer merely another form of spectacle? To address this question, students read seminal works of Situationism as well as related writing past and current, thinking them out by using various forms of mediated perception to carry out derives through our own city.













STUDENTS: Venkata Revanth Anantha, Carlin Co, Lucas Harle, Yao Yao Li, Anton Lialkou, Stephanie Sewall, Mackenzie Sinclair, Carson Wiebe, Matthew Woloschiniwsky



QUESTIONS OF CREATIVE METHODS: METAMORPHOSIS AND MATERIAL IMAGINATION

"We shall see that metaphors are naturally linked to metamorphoses and that in the realm of imagination the metamorphosis of a being is already an adjustment to the imagined environment. The importance in poetry of the myth of metamorphoses and of animal fables will seem less surprising."

—Gaston Bachelard On Poetic Imagination and Reverie

The course explores architectural design situating its creative processes in the realms of place-making and Imagination, and drawing parallels from the analogous fields of literature and philosophy, particularly seen from within the phenomenological tradition. Its contents and goals lean towards gaining an understanding of the notion of the poetic image in architecture and the potential for generative process that derive from metamorphic articulations of poetic or embodied images. The explorations attempt to go in depth into, and expand as well, some aspects enunciated by J. Pallasmaa in his elaborations on the phenomenological implications of architecture as all embodied, poetic, place-experience.

Excerpt from the student Anton Lialkou's essay titled:

"Analyzing Creative Methods: Continuity of the Incomplete in Thom Mayne's Work"

Synthesis of elements and their interaction create unique images causing various associations. To some extent they can be compared to land surface in its variations. Solid objects and surfaces are dismembered baring the processes happening inside. It is possible to draw a parallel with the Earth's crust which is broken off in places of formation of volcanoes or a decaying tree in which new life is formed, there is a catalyzing of processes, metamorphoses. The Earth's surface is not uniform, it has various properties and it inspires. Various conditions of the land surface generated by subconsciousness find a set of interpretations in Thom Mayne's 'drawdles'. These processes are imprinted in dynamics. Continuity of incompleteness of a process, reconstruction of space. There is no end, it is continuous evolution."

ELECTIVE

Instructor: Prof. Eduard Epp Workshop Instructor: Keith Millan

STUDENTS: Lucas Harle, Tom Crossman, Ryan Van Bellegham, Trevor Munroe, Steven Hung, Carson Wiebe, Bryan He.

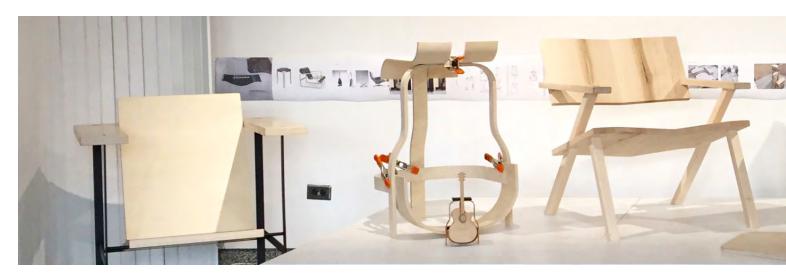
JOINERY: MID-CENTURY MODERN

Overview: This course examines the theory and practice of wood joinery in structures, furniture, and sculpture. Historical and contemporary knowledge, techniques and applications will inform 'hands on' learning and experimentation in a workshop setting. Both manual and digital forms of 'making' will provide the means to engage this course. Joinery refers to the art and science of working with wood. It involves the careful consideration of methods to fabricate, assemble and/or construct with wood at a range of scales from furniture to buildings. Joinery serves as a subject and as a metaphor - as a way of thinking and making in architecture. We can locate this process pedagogically in relation to skill building and knowledge formation that is essential to the intellectual apparatus of an architect.

We will examine the work of artists, architects, and designers who directed their thoughts to making the 'lived world' visibly modern from the mid-thirties to the mid-sixties. More specifically, we will examine furniture designed for domestic living in Europe and North America. The terms 'modern' and 'industrial' figure in understanding work of this

period. However, mid-century modern is also associated with skillfully crafted furniture, capturing a deep longing to engage aesthetic notions of beauty and harmony, employing natural materials. We will examine this work in order to advance aesthetic ideals associated with contemporary domestic life – through the design and production of a piece of furniture. In turn, each student will design and construct of a piece of furniture. The project parameters will be defined by each student, according to the design issues that he/she hopes to explore. The challenge posed is to advance aesthetic notions beyond the midcentury and to locate these in post-modern space and time.

Background: The events that gave a voice to the work of this period include: the formation and work of the Bauhaus exhibited at Weimar in 1923 and the Weissenhoff Siedlung Exhibition in 1927; the Paris' Exposition Internationale des Arts Decorativs, Industriels et Moderns in 1925, which featured Le Corbusier's Pavillon de l'Esprit Nouveau, among others; the XX Salon des Artistes Decorateurs designed



by Walter Gropius et al (and numerous exhibitions that followed), and; the 1929 MOMA exhibition The International Style: Architecture since 1922, curated by Philip Johnson and Henry-Russell Hitchcock.

The overwhelming body of work that is associated with mid-century modern includes urban planning and design, architecture, industrial design, furniture, and art. Some of the leading proponents of this period were able to contribute to all of these emerging areas of Modernism. The early works of Le Corbusier, Walter Gropius, Marcel Breuer, Laszlo Moholy-Nagy, followed closely by Ludwig Mies van der Rohe, Alvar Aalto, and Eliel Sarineen among others, attest to this. The work that was produced in the 1920s and 30s is of particular interest because it foreshadowed the idea of 'organic design', which was a deliberate move away from pure geometric forms and design of the early Bauhaus. The

poetic simplicity of Aalto's Springleaf Armchair, 1932 and Bruno Mathson's Working Chair, 1936 stand out as precursors to this aesthetic.

In 1941, MOMA held a competition and exhibition titled, Organic Design in Home Furnishings, curated by Elliot Noyes. It introduced the world to Charles and Ray Eames and Eero Saarinen among others. Furniture designed in this period privileged the use of wood, together with other materials, both natural and human-made. It embraced new technologies for the crafting and for production of a wide range of furnishings. Supported by the design and manufacturing powerhouses of Knoll International and Herman Miller among others, midcentury furniture became common place – globally.

We will also examine the works of Scandinavian furniture designers in detail. These include Jens Risom, Hans Wegner, Borge Mogensen, and Finn Juhl – to understand

their design intentions and in relation to wood selection, joinery and construction practices, hardware options, and finishing techniques. With this knowledge, each student will design and construct of a piece of furniture. The project parameters will be defined by each student according to the design issues that he/she hopes to explore. The challenge posed is to advance aesthetic notions beyond the mid-century and to locate these in post-modern space and time. Conceptually, the work of Ettore Sottsass comes to mind in his capacity to interpret the Zeitgeist of the 1970s. But more on this later.

Projects (from left to right): Light screen / Lucas Harle; Table+chair / Tom Crossman; Guitar stand / Ryan Van Bellegham; Chair / Trevor Munroe; Shoe rack bench / Steven Hung; Chair / Carson Wiebe; Cajón drums / Bryan He



